RELATIONAL COMMUNICATION IN MOTHER/ADOLESCENT DAUGHTER INTERACTION

by

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A dissertation submitted to the faculty of
The University of Utah
in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

Department of Communication

The University of Utah

May 2012

The University of Utah Graduate School

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ABSTRACT

While much is known about parent-adolescent relationships, less attention has been given to the interactions of mothers and adolescent daughters, particularly within the relational communication perspective. Combining the relational communication approach with qualitative interaction analysis, this study examines the conversational interactions of forty mother and adolescent daughter (between the ages of 14 and 18) dyads. Using a condensed version of the Network of Relationships Inventory (NRI), participants reported on their relational satisfaction, closeness, and support (SCS). Mother and daughter interactions were videotaped in participants' homes as they discussed four topics relevant to mother-daughter relationships. Transcripts of the interaction were coded according to the Relational Communication Control Coding System (RCCCS) and analyzed using statistical procedures and lag sequential analysis. This study expands relational control applications by exploring patterns of relational control and support in mother-adolescent daughter relationships in general, and according to differences between higher and lower SCS groups. Following the case comparison method, predominant patterns and episodes were analyzed qualitatively to elaborate on dialogic behaviors and nuances.

Results indicate mother-adolescent daughter interactions in this study are characterized by daughters' higher domineeringness and dominance and mothers' greater submissiveness. Overall, mothers were more supportive than daughters, while mothers

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ACKNOWLEDGEMENTS

I am indebted to many people whose overwhelming support made this project possible. The contribution of each one has bettered my work and enriched my life.

To my committee members, Dr. L. Edna Rogers, Dr. Mark Bergstrom, Dr. Karen Ashcraft, Dr. Sally Planalp, and Dr. Cecilia Wainryb, thank you for your insightful contributions to this project, and for the many stimulating hours of classroom and personal discussion that have been the highlight of my academic experience.

Additional thanks to Dr. Mark Bergstrom for your extensive statistical guidance, and to Elizabeth Richards, Jessica Henrie, and Brent Warnock, for generously giving your time in coding thousands of messages.

A special thank you to Dr. L. Edna Rogers for providing the theoretical foundation that has inspired my research, and for your countless hours of intellectual mentoring and your uncompromising standard of excellence. Above all, thank you for your steadfast dedication throughout this journey – for your vision, your relational wisdom, and your good humor – and for seeing potential in a budding undergraduate. Your influence as a scholar, teacher, and friend has forever changed me for the better.

To the mothers and daughters in this study who generously allowed me into your homes and relationships, I thank you for your trust and openness. Your willingness to share your strengths and your struggles has given meaning and heart to this project.

And finally, to my family, whose support has allowed me to pursue my passion for studying relationships, and whose love enriches my life with the best that relationships have to offer. To my parents I offer my deepest gratitude and love. To my dad, Robert Cummings, thank you for your example of hard work and for always believing in me. Your unwavering encouragement, enthusiasm, and selfless dedication have been my lifeline. And to the mother/daughter relationship that inspired this study, and the one I treasure most: To my mom, Jo Ann Cummings, whose wisdom, nurturance, listening ear, and good humor have been my ultimate example, comfort, and inspiration. And to my daughter, Anina, whose joyful spirit and unconditional love make being your mom a pure delight.

CHAPTER 1

INTRODUCTION

Adolescence as a developmental phase is known to be a process of continual negotiation and redefining of family relationships through communication. While commonly viewed as a period of transformation and reorganization in families (Grotevant & Cooper, 1986; Steinberg, 1990), a majority of adolescents are believed to move through this time "relatively unscathed" (Noller, 2005, p. 207). Among the protective factors commonly credited with buffering adolescents from the negative impacts of stress, risk factors, and maladjustment, are cohesive and supportive family relationships.

High family functioning can include many elements, but most common among them is open communication where family members feel free to express feelings and attitudes within a culture of acceptance, sensitivity, and flexibility (Grotevant & Cooper, 1986; Koesten, Miller, & Hummert, 2001; Noller & Fitzpatrick,1993; Olson, Russell, & Sprenkle, 1983; Olson, Sprenkle, & Russell, 1979; Satir, 1972; Sillars, Koerner, & Fitzpatrick, 2005). Family communication cultures that encourage adolescents to voice opinions and express individuality along with connectedness promote increased self-efficacy and lower risk behaviors (Koesten, Miller & Hummert, 2001).

A developmental commonality among most adolescents is the desire to gain independence from parents (see Steinberg, 2001 for review) which can lead to decreases in closeness and shared time (Burhmester & Furman, 1987) and increases in conflict (Laursen, 1995). Nonetheless, nurturing parents who provide supervision and discipline have been linked to adolescent achievement, lower aggression, lower substance abuse (Barnes & Farrell, 1992), increased self-esteem, and better emotion coping skills (Wagner, Cohen, & Brooks, 1996). All of this points to the highly dynamic relational dance that occurs in the parent-adolescent relationship.

Mother-Daughter Relationships

Relationships that are ongoing, long-lasting, and important to both parties are of great social and practical importance (Watzlawick, Beavin, and Jackson, 1967). In keeping with this emphasis, the present study will examine the inner workings of what linguist Deborah Tannen has called the "mother of all relationships" (Tannen, 2006, p. 1), the mother-daughter relationship. As Tannen has observed, "Mothers and daughters share a long history – a lifetime, in the daughter's case – and that includes a lifetime of conversations" (p. 113). As a relationship that undergoes perpetual development and rescripting, mother-daughter relationships demand significant attention and relational effort.

Mother-adolescent daughter dyads are unique among the variety of parent-adolescent relationships (mother-son, father-son, father-daughter, as well as step-parent varieties), and stand out for their tendency to magnify the best and worst, most intimate, and most intense of parent-child exchanges. Parent-adolescent conflict, for example, is more common in mother-daughter dyads than in father-daughter, mother-son, or father-

son dyads (Allison & Schultz, 2004; Collins & Russell, 1991). Mothers are also the most likely parent in whom an adolescent may confide. Adolescents engage in the least amount of topic avoidance with mothers compared with fathers or step-parents (Golish & Caughlin, 2002), and even compared with peers (Black, 2002). As for mother support, Trees (2002) found that even though mothers offered the same types of support for both sons and daughters, daughters desired and appreciated their mother's support more than did their sons.

Because of its clear import during this significant developmental stage, the mother-adolescent daughter relationship provides a fertile opportunity for observing communicational repetition of sequences with clear "pragmatic impact" (Watzlawick et al., 1967, p. 130). This study therefore seeks to further our understanding of relating processes between mothers and adolescent daughters as they interact in daily conversation.

Interaction and the Importance of Process

Communication is commonly described as a process, in that it is an exchange of messages and behaviors that occur between people over time. While typically expressed this way, communication is less often studied this way. In fact, the communication discipline has been criticized for not studying its namesake—that is, actual messages and behaviors as they play out between interactants. When Gottman (1981) observed that we are just now emerging from 2300 years of thinking characterized by the individual, he was referring to the domination of personality-based epistemologies and approaches that mark the social sciences in particular. An exception to this line of thinking is the

interaction approach, a process-oriented view of interpersonal relationships that places *relating* as the central focus as opposed to relational participants.

Individuals' psychological interpretations can provide a valuable contribution to understanding relationships, however, relying alone on the cognitions of one or even both relational partners does not explain the relationship, but only how the participants make sense of the relationship. A more comprehensive view is the combining of self-report measures with an interactional approach. "Interaction" it has been said, "has been one of the most talked about and least studied phenomena in the social sciences" (Millar & Rogers, 1987, p. 117).

An epistemological change has occurred in relational sciences in that a guiding theoretical framework has shifted attention from the individual to the relationship, resulting in a wide acceptance of an interactional or relational perspective. This theoretical perspective establishes that our self-conceptions and relationships are affected by our interactions, and that in order to understand relationships, we must search for patterns of observable behavior that tie human actions to the larger social system (Parks, 1977). While many interpersonal and family communication scholars conceptualize communication as an ongoing and dynamic process, the majority of existing research does not reflect this perspective. Extensive search efforts on multiple search engines produce few relational studies that engage actual interaction measures. Even inputting keywords like "interaction" and "observation" resulted in very few studies that methodologically live up to their name. More often, such studies reveal the more common use of self-report questionnaires, diary methods, hypothetical scenarios, and narrative accounts.

Gano-Phillips and Fincham (1995) have suggested four considerations for achieving a more reliable understanding of family interactions. First is the importance of focusing on sequential or temporal aspects of family processes instead of (or in addition to) snapshot glances. As a reminder of bidirectional and multidirectional influences in families they advise, "Given the complexity of family relationships, more sophisticated methodological and statistical procedures will be needed to begin to address questions of reciprocal influence and circular causality" (p. 220). Lag sequential analysis and structural equation modeling exist as two such research measures.

A second issue that is often overlooked in child-adjustment research is the developmental level of the child(ren) studied (Gano-Phillips & Fincham, 1995). Developmental differences exist in children's affective and behavioral repertoires, making age and developmental stage an important contextual factor for consideration. For example, in most families, sibling conflict progressively lessens from year two up through adolescence, whereas, parent-child conflict increases in early adolescence (Vandell & Bailey, 1992) and decreases to its lowest levels in later adolescence (Allison & Schultz, 2004; Furman & Buhrmester, 1992; Steinberg, 1990).

A third issue of consideration for researchers involves a rethinking of the most appropriate level of investigation and unit of analysis (Gano-Phillips & Fincham, 1995). Pertaining to conflict and child adjustment, the most common methodologies to date have included field studies which incorporate self-report measures and observational or interview data. This approach aims to measure overall functioning more than how children respond to specific events. A second popular approach aimed more at specific events utilizes experimental analogue measures that present children with hypothetical or

real conflict situations. Children's responses are observed or children are asked to report on their thoughts and feelings during the conflict. The result of both of these methods is data that favors a micro-level of analysis instead of a "panoramic view of the family as a whole" (p. 222). Attention to macro-level data affords greater understanding of the connection between children's immediate responses and longer-term family or child outcomes. Regarding the unit of analysis, family conflict research more often reflects a dyadic focus than an emphasis on the family system.

A final concern to be considered, according to Gano-Phillips and Fincham (1995) is the general neglect of child-adjustment research in attending to context and the multiple variables that moderate family interaction. Variables such as the socio-emotional climate of the family, relational risk factors (stressors) and protective factors (resources), and different family forms (two-parent, single-parent, etc.) must be considered if we are to gain a more comprehensive understanding of family interactions.

The present study attempts to address the above considerations within the conversational interaction of mothers and adolescent daughters. Of particular advantage in observing this relationship is that the relationship is bound by proximity inasmuch as these dyadic partners live in the same household, encouraging more regular and frequent interaction than mothers and grown daughters. By comparison to mothers and younger-aged daughters, adolescent daughters typically possess more developed communicative capabilities, making conversational reciprocity and in-depth exchange more likely than with younger children.

Interaction research is particularly well-suited for studying family relationships due to the systemic nature of the family and inherent bidirectionality. Family members

are interdependent in their roles and functioning and can be studied at various levels of analysis. The bidirectional nature of influence within family relationships also points to the value of examining interaction within this domain. According to Cappella (1987), dyadic behaviors can be considered interactive only if each of them influences the other's behavior. Much parent-adolescent interaction has been aimed at determining unidirectional effects of parenting on adolescents' socialization, however, models of bidirectional influence exist in which parent-adolescent interactions also affect parents (see Fitzpatrick & Ritchie, 1994).

Relational Communication

The very act of relating is a communicative process. It is through the variety of messages exchanged that individuals form a relationship. How we "do" these messages *is* the relationship. An approach that provides direct access to the relationship via communication is the Relational Communication approach. Rooted in cybernetics (Weiner, 1948) and systems theory (von Bertalaffy, 1968), the pragmatic perspective (Watzlawick, Bavelas, & Jackson, 1967) and relational communication approach (Rogers, 1972; Rogers & Farace, 1975; Slukzi & Beavin, 1965) offer a practical means of applying systemic principles that preserve the richness of dynamic systems such as close relationships. This perspective offers a relational, interaction-based communication approach in which relationships are viewed as "moving, 'living art' forms, creatively shaped by the interactive behaviors of the participants" (Rogers, 1998, p. 70). From this perspective, relationships are the process of relating to another and the means of relating is through communicative messages.

The study of relationships is thereby the study of communication, and the study of communication involves the study of the "characteristics and consequences of messages, not the characteristics of people" (Sigman, 1998, p. 49). Meaning, then, emerges through ongoing interaction, not just in the psychological arena.

Relational theorists are dedicated to understanding how individuals connect through interaction to form a relationship. Looking at the family as a system means viewing it as a "dynamic whole composed of constantly shifting interrelationships, but still bounded, and rule-governed" (Sieburg, 1985), p. xi). Rogers (1989) declared, "relationships are not reducible to the characteristics of individual interactors or single messages, but are complex organizations of the combined actions of relational members" (p. 280). The rationale for studying mother-daughter interaction from a relational approach is supported by the actuality that members of a family system, and dyadic subsystems, are interdependent, are affected by one another's behaviors, and create relational meaning through their interactions.

Incorporating Quantitative and Qualitative Interaction Analysis Approaches

Interaction methods offer a rich glimpse into the intricate and dynamic processes of human connection. With a focus on process and form, relationship is constituted in the unfolding gestures, awkward and graceful, spoken and unspoken, between partners continually moving in or out of concert with each other. This study broadens and builds upon the empirical lens afforded by interaction research by extending the analysis qualitatively. Beyond its function as a methodological model, a qualitative approach in the present study provides a conceptual framework, a way of thinking about relationships

as jointly-constructed, continually negotiated, being pulled by opposing tensions that can imbalance or balance relationships depending on how they are negotiated. Incorporating interaction and qualitative analysis can take many forms, but the emphasis is to seek greater understanding of participants' behaviors and patterns of relating through a disciplined and intuitive analysis of observed interaction.

Qualitative inquiry affords a means to move past the level of mere description and towards analysis that considers meaning, intention, and context of human behavior. Interpretive research has thus appropriately been called a "feat of empathy and analysis" (Nader, 1993, p. 7). The key philosophical premises that distinguish a qualitative ontology include a subjectivist position taken by the researcher, and a perspective on the phenomena of study as locally situated, socially constructed, temporal, incongruent, and dialectically contradictory.

The qualitative interactional approach in this study emphasizes an analysis of patterns, content and themes, turning points, and change events assessed through a process of constant case comparison (see Fairhurst, 1993). As Holmes and Bergstrom (1999) point out, one benefit of a coding scheme is its capacity to index certain behaviors within mountains of data, allowing for greater ease in locating occurrences of certain behaviors or events like arguments, repair attempts, support, disconfirmations, apologies, etc. Guided by the interactional coding scheme and significant quantitative findings, conversational points of interests were identified and closely examined for prominent behaviors, patterns, and themes. Repeated readings of the conversation transcripts in their entirety and by select sequences informed the qualitative analysis and allowed for comparison between dyads, between mothers and daughters as a group, and between

higher and lower satisfaction groups. The multifaceted approach of quantitative and qualitative methodologies mutually enhanced this examination of the relational behaviors of mothers and adolescent daughters in this study.

Summary

This study offers a methodological extension of the relational communication approach in an effort to expand and enrich present understandings of the mother-adolescent daughter relationship. The result is a layering of analyses varying in focus and scope, as well as process and form. Global patterns as well as subtle nuances were attended to and meaning was considered from multiple levels of behavioral analysis.

In keeping with a commitment to interaction-based research, this study examines videorecorded conversational interactions of mothers and daughters between the ages of 14-18. Observing family relationships can present a challenge to researchers in that the personal nature of these relationships and the private environment in which they play out can be difficult to observe. In order to invoke a more natural and comfortable environment, conversations took place in participants' own homes with the researcher on-site although not present in the same room during the conversation. Four pre-selected topics for discussion were given to each mother-daughter dyad which were designed to solicit conversation around four themes relevant to the mother-daughter relationship. Dyads were asked to converse about each question for approximately 8-10 minutes, for an average of 32-40 minutes of total talk time. Videotaped conversations were then transcribed, coded, and analyzed.

Among the variables and phenomena of interest in this inquiry are the negotiation and enactment of control, support and nonsupport, conflict, and change events. More

specifically, this study examines (1) global patterns of relational control between mothers and adolescent daughters; (2) a comparison of behavioral patterns between dyads that rated themselves higher and lower in satisfaction, closeness, and support; and (3) a qualitative interactional analysis of patterned behavior and change events analyzed via discourse comparison. Observational coding based on the Relational Communication Control Coding System (RCCCS) identified instances and patterns of the above variables and others to be discussed later. Qualitative analysis via the constant case comparison method (Fairhurst, 1993) allowed for further evaluation of sequential patterns and change events that altered the interaction in notably positive or negative ways. Relational satisfaction, closeness, and support were assessed using a self-report questionnaire.

In the chapters that follow, literature, research, and theoretical approaches to the study of mother-daughter relationships—as well as parent-adolescent relationships in general—and conflict and support will be reviewed (Chapter 2). Methodological approaches are also laid out with attention given to the conceptual influence and relevant research associated with each. Chapter 2 concludes with an explication of the research questions that guide this study. Methodology and analytic procedures are described in Chapter 3, followed by a presentation of results in Chapter 4. Finally, Chapter 5 concludes with a discussion of the implications of the findings and key contributions of this study, limitations of the study, and considerations for future research.

CHAPTER 2

REVIEW OF LITERATURE

Daily interactions between parents and adolescents include discussing ideas, asking and answering questions, disagreements, and attempts at resolving conflict, negotiations, and expressing feelings. Within these interactions, researchers have investigated a number of relational phenomena relevant to the present study. The review of literature to follow is organized in two parts. In the first, parent-adolescent research is reviewed initially as it relates to family and parent-child communication. Following this, two dominant themes in the literature are explored: (1) conflict and negative interactions, and (2) support, including confirmation and openness. Each will be reviewed in turn. The second half of the literature review will explicate the methodological groundings of the relational communication, including the Relational Communication Control Coding System, and qualitative interactional approaches, both of which philosophically inform this study from conceptualization through analysis.

The Relational Communication Control Coding System (RCCCS) is expounded in detail here not only to provide a backdrop to the present study's methodology, but to explicate research findings ascertained through the RCCCS that inform this study. Previous family-based research using this coding system has focused primarily on husbands and wives, and more recently, families in therapy, and therefore does not allow a direct comparison with the present study's focus on mother-adolescent daughter

relationships. However, there is much conceptual and topical overlap from existing relational communication research on control and support in particular that offers insight for family relationships. Considerations framing qualitative interaction analysis are similarly laid out. The review of literature will conclude with an outline of research questions.

Parent-Child Communication in Adolescence

Adolescence is a time of reflection on the new and unfamiliar complexities of the self, the family, and relationships in general. As a developmental stage, adolescence occurs between the ages of 11 and 22 (Cobb, 1998) and is well known as a period of identity exploration in which children take their initial steps towards independence and autonomy. Consequently, identities and relationships are continually being renegotiated. Family relationships in particular can become a site of contention in adolescents' endeavor to balance autonomy and connection. Nevertheless, family can also be a site of support and positive identity reinforcement that offers adolescents a sense of stability and acceptance in an at-times tumultuous phase of life.

Compared to previous generations, adolescents today spend less time interacting with immediate family and invest more time in school activities, part-time jobs, or with friends (Koesten, et al., 2001). Nevertheless, family, and specifically the parent-child relationship, provides an arena in which adolescents develop social skills and communication practices that enable them to develop their own voice (Bruner, 1990). For adolescent girls in particular, the family is still deemed the most important context in which a young woman's discursive skills, and relatedly, her identity and behavioral repertoires are developed and fortified (Koesten, et al., 2001). Needless to say, the quality

of the parent-child relationship is integral in determining the extent to which voice, identity, behavioral competence and discursive skills are developed and found rewarding and mutually beneficial to the relationship.

It has been suggested that the most positive parent-child relationships are those which promote "mutual sensitivity, flexibility, and coordination" (Sillars, et al., 2005, p. 106) and those in which family members feel confirmed and are able to help each other address impending problems. Families who openly converse, listen, and even argue are more successful in cultivating adolescent daughters' self-esteem and self-efficacy, not only within her family but with her peers as well (Koesten, et al., 2001). Young women from families with an open and accepting communication culture have a much easier time voicing their opinions, maintaining boundaries, and making their own decisions. In contrast, young women from families with a closed and unaccepting communication culture feel more hesitant in both family and peer interactions, lack the confidence and ability to make their own decisions, and more frequently engage in risk behaviors.

Koesten, et al.'s (2001) interviews with late-adolescent young women sheds light on how family communication practices enable or hinder adolescent girls' ability to manage risk behaviors such as drug and alcohol use, depression, date rape, smoking, teen pregnancy, eating disorders, gender ambivalence, and domestic violence. Significantly, the quality of the family relationship as indexed by the quality of their parent-child communication was the most notable difference distinguishing adolescent girls who had engaged in risk behaviors and those who had avoided risk behaviors.

The ability to express opinions and assert individuality within the family is key to adolescent development (Grotevant & Cooper, 1986). It is thereby likely that adolescents

who communicate regularly with their parents in such healthy ways as have been described are learning discursive skills that empower them to feel more in control of difficult risk factors such as depression and anxiety, substance abuse (Koesten, et al., 2001) and sexual activity (Coates & Widenfelt, 1991). Such findings confirm the benefit of open, nurturing and mutually-satisfying communication within families.

"Healthy" family communication has been defined a number of ways. Renowned family therapist Virginia Satir (1972) proposed that productive family communication is direct, clear, specific, and honest. Nurturing families, she advised, have flexible and appropriate rules that take the humanness of family members into account. Similarly, Noller and Fitzpatrick (1993) identified four elements of healthy families: openness, identity confirmation (responding to a person as they wish to be seen), adhering to manageable interaction rules, and being situationally flexible and/or adaptable. Turner and West (2006) propose that the cornerstone of effective family interaction rests on family members' ability to express and defend their opinions and clarify misconceptions. Thus a common feature of healthy family communication seems to be open, direct, and nurturing communication that strikes a balance between individual interest and others' well-being. Other proposed formulas advise parental involvement in the form of nurturance, supervision, discipline, and enforcing consequences; all of which have been linked to adolescent achievement, lower aggression, and lower substance abuse (Barnes & Farrell, 1992). Such parental communication has been shown to increase self-esteem, and enhance emotional regulation and coping skills (Wagner, et al., 1996).

A parenting style long lauded for its contributions to healthy child and adolescent development is that of authoritative parenting (Baumrind, 1971). Guided by three

principles, authoritative parents are 1) warm, concerned, and involved in their children's lives, 2) firm and consistent in upholding rules, boundaries, and developmentally appropriate expectations, and 3) supportive of their children developing their own opinions and beliefs. Steinberg and others have called this "psychological autonomy granting" (Steinberg 2001; Steinberg 1990; Steinberg, Elmen, & Mounts, 1989) and have contrasted its benefits with the opposite expression of psychological control which children experience as overprotective and intrusive. Silverberg and Steinberg (1987) found that the degree of emotional autonomy parents grant their same-sex child (mother towards daughter, father towards son) was positively related to that parent's experience of midlife identity concerns, and that mothers' well-being, but not fathers', is negatively related to the intensity of conflict with their adolescent.

Regardless of racial or social background or their parents' marital status, preschool, elementary-age and adolescent children raised by authoritative parents show psychosocial and developmental advantages including higher school achievement, less depression and anxiety, higher self-esteem and independence, and fewer antisocial behaviors like drug and alcohol use and delinquency (Steinberg, 1990; Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Steinberg, Lamborn, Darling, Mounts, & Dornbusch, 1994; Steinberg, Lamborn, Dornbusch, & Darling, 1992). It should be noted, however, that while firmness discourages rebellious behavior, excessive strictness does not (Gray & Steinberg, 1999). Aside from the above positive outcomes, authoritative parenting is credited with making children more receptive to parental influence based on the parent's loving involvement in the child's life, facilitating self-regulatory skills as a consequence of structure and high

expectations, and fostering cognitive and social competence by being engaged in verbal exchanges that enhance the child's ability to think critically and express opinions.

Benefits of successful parent-child relationships can extend beyond the self and family context to peer relationships as well. Often measured by attachment, securely attached adolescents are found to be more socially competent, have more positive interactions with their peers and are more well-liked by their peers than those with insecure attachments (e.g., Allen, Moore, Kuperminc, & Bell 1998; Black & McCartney, 1997; Cassidy, Kirsh, Scolton, & Parke, 1996; Kobak & Sceery, 1988). This can be credited in part to internal working models, which in secure relationships, encourage children to view other as trustworthy and view self as worthy of positive relationships. It is also likely that a good relationship with parents teaches children relational skills that transfer to peer relationships.

In examining the influence of good parenting on peer relationships, Black (2002) videotaped 39 mother-adolescent and adolescent-best friend interactions during conflict resolution tasks. Mothers' communication and support with adolescents correlated positively with adolescents' communication and support of their friends, although adolescents' communication and support toward friends was to a lesser degree than mothers' towards their children. Adolescents also used more avoidance in discussing problems with peers than they did with mothers. This may be attributed to adolescents' perception of mothers as unconditionally accepting or they may have learned that avoidance and withdrawal tactics are less successful with mothers than friends.

Parent-Adolescent Conflict and Negative Interactions

Adolescence is an important period in the formation of identity (Marcia, 1966). It is during this time that adolescents often challenge the roles set for them by their parents (Erickson, 1966) and experiment with various roles and identities that may be contrary to or different from their parents' values. Inasmuch as most adolescents are working to become more independent from their parents (see Steinberg, 2001; Zimmer-Gembeck & Collins, 2003 for reviews), decreases in closeness (Burhmester & Furman, 1987) and family time (Larson, Richards, Moneta, Holmbeck, & Duckett, 1996) are not uncommon. This is typically accompanied by increases in conflict (Laursen, 1995) and topic avoidance (Guerrero & Afifi, 1995).

A widely recognized tension marking parent-adolescent relationships is the struggle between autonomy and connectedness. Because adolescence is a marked time of growth and transition, identities and relationships within the family are continually being renegotiated, making this a critical time for adolescents to "explore their individuality as well as their connectedness" (Koesten, et al., 2001, p. 9). Indeed, the realization of one relies on the other. As Youniss and Smollar (1985) express, "as adolescents become aware of their interdependence with others, other persons become that much more critical to their autonomy" (p. 169).

As evidence of teens' increased desire for autonomy, Noller (1995) found adolescents to be more likely than parents to initiate distancing attempts, and Mazur and Hubbard (2004) found that in trying to avoid certain conversational topics with parents, adolescents distanced themselves from parents through deception, aggression, and rejection. While these findings speak to adolescents' desire for privacy and distance from

their parents, they also indicate a deficit in adolescents' adaptive communicative abilities which paradoxically inhibits their likeliness of achieving desired independence and self-efficacy.

Pinquart and Silbereisen's (2002) study of 76 mother-adolescent (ages 11-16) dyadic interactions revealed that feelings of connectedness were linked with lower levels of observed negative affect (hostility), more receptiveness toward others' arguments, less rejection of other, and more positive affect. Alternately, evidences of adolescents' bids for autonomy in their relationships with their mothers were not exclusively categorized as conflict, but instead were marked by the adolescent stating and arguing a contradictory opinion, defending it with confidence, and demonstrating power or influence on solutions to conflict. Whether differences of opinion confidently expressed should be considered conflict may be a question of subjective appraisal or a question of operationalization.

Attending to ethnicity-related differences, Penington (2004) studied 14 African American and European American mother-adolescent daughter (ages 13-17) dyads to explore how the pairs manage autonomy and connectedness in their relationship. Employing a grounded approach, interviews and taped interactions were analyzed for qualitative themes and strategies. During the interaction activity participants were asked to discuss three topics for 5 minutes each. The questions posed asked mothers and daughters to plan in detail a fantasy vacation, discuss their similarities and differences, and identify three pieces of advice on having a close mother-daughter relationship. Both African American and European American dyads used many of the same strategies but African American mother-daughter dyads put greater emphasis on closeness in their relating whereas European American mother-daughter dyads favored greater autonomy.

Vast research on parent-adolescent conflict has established a direct connection with poor adolescent adjustment and well-being (Caughlin & Malis, 2004; Cole & McPherson, 1993; Crouter, Bumpus, Maguire, & McHale, 1999; Robin & Foster, 1989), including increased drug use, depression, and low self-esteem. Nevertheless, some researchers have found parent-adolescent conflict to be helpful in facilitating constructive developmental benefits such as cognitive development and individuation (Graber & Brooks-Gunn, 1999; Steinberg, 1990; Smetana, 1989). Further, some contend that parents are more negatively affected by parent-teenager arguments or squabbles than their adolescent and that conflict over everyday matters is more distressing for parents and more easily dismissed by teens (Steinberg 2001; Steinberg & Steinberg, 1994).

Research on parents and adolescents shows that mothers and teenagers may experience mutual interactions in different ways (Larson & Richards, 1994). Sillars and his colleagues have looked at family conflict as it relates to mutual understanding between parents and adolescent children (Sillars, et al., 2005; method adapted from Ickes & Tooke, 1988, and Sillars, Roberts, Leonard, & Dun, 2000). After separately completing questionnaires, 50 parent-adolescent triads gathered in a laboratory "living room" to discuss three of eight topics typical of parent-adolescent disagreements (including chores, allowance, homework, family time together, responsibility and freedom, criticism and appreciation, listening and respect). Families were instructed to discuss whether the topic was one of disagreement, how it affected the family, and how they could solve the problem. While individually viewing the videotape, family members reported on their own thoughts during the conflict as well as their perceptions of other family members' thoughts. To assess families' levels of mutual understanding, thought

responses were coded according to how closely the participant's thoughts matched those of other family members. Interestingly, results indicated that parents' understanding of children's thoughts was low. Parents who demonstrated greater understanding of their child were those who communicated openly and frequently, and reported high parent-child relationship satisfaction. As well, family members made more positive attributions about their own thoughts and behavior and more negative attributions about other family members.

Holmbeck (1996) has called for an investigation of "the conditions under which conflict is adaptive versus when it is dysfunctional" (p. 173). Typically, conflict measurement items as adopted from highly utilized scales such as the Conflict Behavior Questionnaire (Prinz, Foster, Kent, & O'Leary, 1979) and the Family Environment Questionnaire (Moos, 1984) gear participants toward reporting the amount and frequency of conflict in their family. However, if we are to understand how and why some parent-adolescent conflict is constructive while some is destructive, scholars must expand their lens to incorporate conversational and relational context and sequentiality.

In response to this call, Caughlin and Malis (2004) extended their focus beyond the mere amount of parent-adolescent conflict to examine patterns of demand/withdraw communication with consideration for the systemic properties of a family dyad (see Watzlawick, et al., 1967). Taking this approach means looking beyond the communication behaviors in the subsystem to the interdependence of those behaviors. Demand/withdraw patterns are those in which one person nags or criticizes and the other person avoids the issue or interaction through a variety of means.

Caughlin and Malis' (2004) study looked at parent-adolescent interaction in 57 dyads including one adolescent between 13-16 years of age and a mix of fathers and mothers. Participants completed pre- and postquestionnaires as well as an audio-recorded conversational task in their home or a campus setting. Dyads were given three cards listing the topics they were to discuss, which were based on participants' ratings of topics on which they most desired change from the other. In addition to external coders, participants also rated the extent of demand/withdraw in their conversation.

Given that the connection between demand/withdraw and marital dissatisfaction is so robust, a similarly dissatisfying connection in other family dyads seemed likely. Indeed, Caughlin and Malis' (2004) study of parent-adolescent dyads confirmed a number of associations between demand/withdraw patterns and dissatisfaction, as well as poor relational adjustment between parents and adolescents. Even after controlling for the overall amount of conflict in the relationship, the negative association remained. Among the most compelling of their findings was the strength of the relationship between parent-adolescent demand/withdraw patterns and high-risk behaviors such as alcohol and drug use and low self-esteem in both adolescents and parents. However, while demand/withdraw was positioned as a predictor construct in their study, the correlational design allows for the possibility that alcohol and drug use, and self-esteem may influence demand/withdraw behaviors. Notwithstanding, the findings confirm the deleterious effects associated with demand/withdraw patterns and its relation to destructive rather than constructive conflict. The authors advise that regardless of parents' assessment of the importance of an issue, parents should more often respond as opposed to withdraw when adolescents wish to discuss an issue.

A component of the demand/withdraw communication pattern, topic avoidance has also been examined in an effort to uncover common topic-avoidant responses (Mazur, Hubbard, & Ebesu, 2004). Twelve adolescent avoidant-response strategies emerged including, deception, aggression, direct rejection, indirect rejection, assertiveness, disinterest, listening, terminating the conversation, discussing the topic, reassurance, crying, and discomfort. Consistent with Communication Boundary Management (Petronio, 1991), adolescents report that topic avoidance serves as a means to renegotiate and fortify privacy boundaries against parental invasion. Investigating family communication patterns, Koesten, et al. (2001) found that girls from more closed and distant families recognized a self-ascribed inability and/or unwillingness to communicate in productive ways. They spoke of *choosing* to "embark on their journey alone, without consultation with their parents or any other significant adult" (p. 19). Among other things, this indicates that parents are not alone in creating the communication climate within the family, and instead a reciprocal relationship exists in which adolescent daughters share, at least to some degree, the ability to influence and negotiate the roles and expectations of the parent-child relationship.

In a study of topic avoidance in conversations between adolescents and their parents and step-parents, Golish and Caughlin (2002) reported that adolescents engaged in the least amount of topic avoidance with mothers and the most with step-parents. Topically, sex was the most-frequently avoided conversational subject among all relationships, followed by talking about the other parent (in a divorced family), deep conversations, and money or child support. Considering the variety of possible parental

confidants (mother, father, step-mother, step-father) these findings suggest that mothers are the most likely parent in whom an adolescent may confide.

All things considered, parent-adolescent conflict is largely viewed as a developmentally typical, if not appropriate, response to adolescents' desire for greater autonomy. Nonetheless, such conflict often stimulates stressors that can lead to hostility, misunderstanding, and a variety of undesirable individual and relationship outcomes. Alternately, cohesive and affectionate connections with parents are essential to healthy development (Allen, Hauser, Bell, & O'Connor, 1994; Grotevant & Cooper, 1986), signifying that autonomy and closeness between parent and child are important to achieve in balance. Such connections of warmth and nurturance will be examined in the following review of relational support, confirmation, and openness.

Support, Confirmation, and Openness

Several decades of research has accumulated an impressive documentation of the positive effects of supportive social interactions (see Burleson & MacGeorge, 2002, and Vangelisti, 2009 for review), including protection against psychological disorder, disease, and mortality, increased self-efficacy (Krause, Liang, & Yatomi, 1989), improved coping ability (Cunningham & Barbee, 2000), and stress management (Pierce, Sarason, & Sarason, 1996; Tardy, 1994). Pertaining to children, several studies have suggested the importance of communication and comforting skills as major determinants of peer acceptance (Burleson, 1986; Burleson, Delia, & Applegate, 1992). In fact, deficits in communicative and social skills are thought to be a primary reason for peer rejection, making supportive communication an important feature of family interaction with implications for both family and friendship development and maintenance.

Common features of adolescence such as unstable cognitive structures, an undeveloped ability to take parents' perspective, and intentional avoidance of certain topics allow for increased misunderstanding and/or decreased connection between parent and child (Sillars, et al., 2005). During this period of heightened uncertainty, parents can offer adolescent children acceptance, support, and a sense of belongingness. Given the potentially tumultuous nature of adolescent friendships and romantic relationships, family relationships can provide necessary assurance of relational permanence. To counterbalance problematic feelings of insecurity that underscore this developmental phase, parents have the opportunity to instill in their adolescent children a much-needed sense of stability and support. Likewise, adolescents' comforting strategies, at least with peers, are known to become more sensitive (Ritter, 1979) and diverse (Burleson, 1982) as they mature towards later adolescence. Further, girls from grades 1 through 12 exhibited greater skill in comforting behaviors than their male counterparts; however while the difference was statistically significant, it was not particularly large.

Those who study human interaction have long regarded support as a significant feature of human communication. Less attention, however, has been given to the various ways support has been conceptualized, defined, and studied, making comparison of results difficult (see Vangelisti, 2009; Sarason & Sarason, 2009). In a review of social support research, Vangelisti (2009) outlined three perspectives that dominate the literature: first, a sociological perspective that focuses on how individuals are integrated into social groups; second, a psychological perspective emphasizing the type or amount of support individuals receive or perceive is available to them; and third, a

communication perspective in which verbal and nonverbal enactments of support are evaluated.

Vangelisti (2009) raises five issues affecting the conceptualization and implications of support in personal relationships, the first being whether support is wanted or unwanted. While social support studies have widely validated the benefits of support, Vangelisti contends that negative responses to support should not be considered aberrant given that social support can be unhelpful, costly, or embarrassing, increase self-consciousness, and bring unwanted attention or indebtedness. Thus, depending on the meaning ascribed by the recipient, support outcomes may be satisfying, unsatisfying, or simultaneously positive and negative (see Lewis & Rook, 1999).

Second, whether supportive acts are delivered in more or less skillful ways affects how those acts are received. Showing love and concern and giving practical help in ways that are person-centered (Burleson, 1994) or invisible (Bolger, et al., 2000) tend to be helpful support behaviors. Person-centered support garners positive reaction because it is motivated by a focus on the other's emotional and cognitive well-being, while invisible support refers to care that is unnoticed by recipients. To the contrary, overprotectiveness, insensitivity, or incompetence in caregiving is for obvious reasons, considered unhelpful. Supportive acts in the form of "tough love" can be effective as long as the underlying tone of the message is not hurtful.

The third issue for consideration is that support must be studied sequentially as an interdependent and mutually influencing occurrence, not as an isolated event. The salience of positive versus negative sequences in relation to satisfaction should also be considered given previous research which suggests negative interaction sequences may

have more impact on the effects of support than positive behaviors (Gottman & Levenson, 1986; Huston & Vangelisti, 1991).

Fourth, support may be considered preventative in that it acts as a buffer against stress. Scholars attribute increased coping abilities during and following stressful events largely to social integration and support (Brissette, Cohen, & Seeman, 2000; Taylor, 2002). Consideration should be given for crediting a lack of distress to the presence of relational support.

Finally, in addition to studying support in response to negative events in people's lives, attention should be turned to the degree of support offered for positive events as well. Cases in which partners fail to offer comfort, encouragement, or physical presence are equally important, and possibly moreso in satisfied relationships where partners spend more time together (citing Kirchler, 1989) doing pleasurable activities (citing Marini, 1976).

Support has been classified into five categories helpful in distinguishing differing applications of support (Cutrona & Suhr, 1994): emotional support including expressing care, concern, and sympathy; esteem support which refers to expressing liking, confidence in, or reassurance of the other); network support signified by expressing connection and belonging; informational support expressed by giving information and advice; and tangible support which can include giving money, material aid, or physical intervention. These categorizations are useful in evaluating varying amounts, types and purposes of support offerings.

Using this typology (Cutrona & Suhr, 1994), Trees (2002) enlisted undergraduate students along with their mothers in an investigation of gender-related support processes

between mother-son and mother-daughter dyads. Eighty-two sons and daughters, ranging in age from 17 to 29 years, discussed with their mother a relational problem unrelated to the mother-child relationship, most commonly in regards to friend relationships, romantic relationships, and work relationships. In addition to the videotaped conversation, mother-child pairs separately viewed the first two minutes of their taped interaction and completed questionnaires including a scale measuring desired support by the child.

Among the most notable findings, daughters reported a greater desire for emotional and problem-focused support, although mothers extended comparable amounts of both types of support to sons and daughters (Trees, 2002). Daughters also reported a greater appreciation for mothers' informational support and tangible aid/network support than did sons. Mothers' verbal support and nonverbal involvement did not seem to differ between sons and daughters. As well, verbal and nonverbal disclosures of sons and daughters did not differ. Possible inferences are that daughters' expectations of mother-support are higher than that of sons and that daughters may be more cognizant of their mothers' support and consequently deem it more desirable and valuable.

Inherent in and directly related to the conceptualization of support is the notion of confirmation. Confirming messages have been examined and defined as responses that make us value ourselves more. Beginning in the late 1960's and 1970's the term "confirmation" came to be defined precisely enough to form a basis for empirical study and was approached as a relational construct based on the interactional view of Watzlawick, et al. (1967).

Confirming messages are those that acknowledge the uniqueness of the other and make the other present (Friedman, 1983). Buber (1957) was the first to use the term

"confirmation" in an interpersonal sense. He did not offer an explicit definition, but did describe confirmation as basic to humanness:

> The basis of man's life with man is twofold, and it is one, the wish of every man to be confirmed as what he is, even as what he can become, by men; and the innate capacity in man to confirm his fellow men in this way. Actual humanity exists only where this capacity unfolds. (p. 102)

Confirmation has received the most attention in clinical or psychotherapeutic settings, with valuable contributions made by Bateson and the Palo Alto group, and Laing (1961). Although his focus was on the psychiatric implications of confirmation, Laing did much to develop confirmation at a conceptual level, depicting confirmation as a process through which individuals imply recognition and acknowledgment of the other. His work is marked by an experiential theme that views confirmation as showing concern while relinquishing control. Confirming messages foster sensemaking and understanding in the recipient inasmuch as they encourage other to elaborate on their experience with confidence in its acceptability (Burleson & Samter, 1985). Confirmation thereby promotes openness in relationships.

Building on past research linking confirmation with positive identity and self-worth in children (see Ellis, 2002; Laing, 1965; Satir, 1967; Sieburg, 1985), Dailey (2006) established a connection between confirmation and adolescent openness. Consistent with others, Dailey concludes that confirming parents provide a safe and encouraging climate in which adolescents are "coached" (e.g., Gottman, Katz, & Hooven, 1996) in expressing emotion and thereby perceive greater self-efficacy. As Dailey suggests, "confirmation encourages communication so that individuals can explore, develop, and process their thoughts or feelings" (p. 437). Ideally, the benefit for both partners is a better understanding of self and the relationship.

One of the most notable differences between girls from close, open families and distant, closed families was in the inability of young women from distant, closed families to experience both individuality and connectedness (Koesten, et al. 2001). Whereas the young women from communicatively open families felt equally comfortable expressing their individuality and seeking support and guidance, the young women from communicatively closed families felt that individuality could not co-exist with family connectedness. These young women rarely sought counsel and support from their parents, even during their most difficult times and most risky periods. Thus, a close and supportive parent-child relationship can potentially influence not only an adolescent's sense of security and belongingness, but can also facilitate her achievement of greater independence and self-reliance.

In contrast to confirmation, messages of rejection and disconfirmation are those that make us devalue ourselves. Whereas confirming messages offer support by acknowledging the other's existence and uniqueness, disconfirming messages express nonsupport by communicating in a way that denies the existence or importance of the other. Although many research studies form a dichotomy of confirming-disconfirming acts, there are many types and degrees of rejection and disconfirming behaviors. Messages of rejection essentially tell the other, "You are wrong" (Watzlawick et al., 1967, p. 86), whereas disconfirmation essentially amounts to the message "You do not exist." Different degrees of disconfirmation have been identified, such as indifference, imperviousness, and disqualification, although in its most extreme form, disconfirmation does not acknowledge the other in any way. Conceptually and functionally, rejection and all forms of disconfirmation are comparable to nonsupport.

The longer an individual experiences a particular pattern of interaction in relationships (be it positive or negative), the more resistant to change that individual will be in his or her view of him/herself and the world (Moroz, 1997). Every individual is subjected to some degree of disconfirmation. While occasional disconfirming messages can make us feel depressed or unhappy, repeated disconfirming messages can undermine our self-concept and lead to "feelings of alienation, interpersonal antagonism, and even mild forms of personal despair" (Dance & Larson, 1972, p. 143). Indeed, Dailey (2006) reported that children of disconfirming parents experienced a rejecting climate in which they expected to be dismissed or negated. Disconfirmation also emerged as an indicator of parent-adolescent relationships that were less open.

Based on interviews with 25 women between the ages of 18 and 20, Koesten, et al. (2001) revealed that young women from families with more distant and closed communication styles reported greater involvement in risk behaviors (i.e., drug and alcohol use, smoking, teen pregnancy, eating disorders) that suggest lower self-esteem, self-efficacy, and an inhibited ability to withstand the pressures of their peer groups. The young women were asked in free-response and critical incident interviews for their perceptions of their family communication culture through the developmental years of middle school and high school, their perceived social skills, self-efficacy, and their reported risk behaviors. Girls from closed and distant families reported feelings of hesitancy, uncertainty in making decisions, and lack of control that suggests a link between family communication practices and adolescent outcomes. These young women spoke frequently of their strivings to "fit in" somewhere outside of their family. Their desire for connectedness with their peer group speaks to the girls' urgency to find

connection somewhere. Conversely, young women from open, supportive, and close families reported experiencing greater independence. It was these girls who talked of feeling capable of making their own decisions, confident enough to speak their mind, and comfortable with themselves to the point that they rarely felt influenced by the likes and dislikes of their peers. These young women also reported the fewest risk behaviors, indicating yet another avenue of their freedom - freedom from burdensome addictions and limiting circumstances.

Communication scholars have found the potential of supportive and nonsupportive messages so great a factor in human development that it has warranted extensive attention. Cissna and Sieburg (1981) state that "the degree to which an individual feels confirmed as a person also is related to success in various relationships" (p. 315). Watzlawick, et al. (1967) view confirmation as a necessary element of all human interaction in which the confirmation of a person's self-image is "probably the greatest single factor ensuring mental development and stability that has so far emerged from our study of communication" (p. 84).

The meaning that individuals attach to support is influenced by the degree to which the message is interpreted as confirming or disconfirming, as well as the quality of the relationship in which it is given (Vangelisti, 2009; see also Miller & Ray, 1994). Types of support offered, the degree of conflict or distress present in the relationship, and the extent to which support is wanted and helpful are other integral factors for consideration in measuring relational benefits of support.

Interaction as Method and Approach

Without detailing a comprehensive review of interactional research, it is helpful to examine the foundational issues related to this approach and review strands of research conducted within this realm as they relate to the present study. Interaction research, also referred to as observational research generally involves the observation of verbal and nonverbal behavior by a researcher or trained coders who are usually unfamiliar with participants. Behavioral observation, or interaction research, has been referred to as the "gold standard" (Feeney, 2006) of relational research methods. That this method allows for the study of both form and process is one of its greatest strengths. A study of process affords analysis of such temporal characteristics as sequence, duration, rhythm, and timing of behaviors, all of which can be analyzed at four levels: the level of the utterance; the level of the conversation; at various points during the relationship; and during multiple periods of a participant's lifetime (Knapp, Daly, Albada, & Miller, 2002).

Both interactional and qualitative observational research are reputedly complex and time-consuming but yield rewards in their ability to capture the richness of time, space, and movement, and the subtleties of nonverbal cues. They also allow for consideration of contextual factors and local logic that influence the meaning of participants' experiences. The methodological decision to videotape participants' conversations in their own home is an attempt to cultivate a naturalistic research environment that encourages the greatest likelihood of participants' authentic behavior.

Given that many communication processes, like conflict and support-giving, are often emotionally-charged and spontaneous, measures like self-report methods alone may lack the ability to portray conflict processes. For this reason, observational measures offer

greater precision in representing these dynamic exchanges. Gottman and Notarius (2000) suggest that observational data "reveal a replicable portrait of complex social interaction that lies beyond the natural awareness of even the most keenly sensitive spouse or partner, and thus lies beyond assessment with self-report instruments" (p. 927). In order to create conflict opportunities for research participants, Gottman's (1979) *conflict interaction paradigm* asks couples to identify a topic of disagreement in their marriage and then discuss that topic on videotape. Conflict interactions are then coded for occurrence and frequency of specific behaviors as well as patterns of emotional or behavioral expression. Several research efforts examining conflict have followed the *conflict interaction paradigm* (see Roberts, 2006 for an extensive review), with an eye towards negativity, hostility, controlling behaviors, and conflict escalation.

Identifying and adjusting communication patterns is a primary objective of family therapy with the goal of repairing and improving the quality of family relationships. To this end, various research programs have directed their aim at providing information for use in marital and family therapy (Friedlander & Heatherington, 1989; Heatherington & Friedlander, 1990; Vuchinich & Angelelli, 1995; see also Rodriguez-Arias, 2004 for a review of psychotherapeutic applications among Spanish couples). Friedlander and Heatherington's work with the Family Relational Communication Control Coding System (FRCCCS) examines interaction and relational control within the therapeutic setting itself.

Relational Communication: Theoretical and Conceptual Approach

As stated, the interactional approach calls for the study of observable behaviors of relating instead of or in addition to self-report measures. The relational perspective draws on a theoretical rationale that incorporates an ecologically based systems approach based on the principle that an analysis of parts cannot provide an understanding of the functioning whole.

The Relational Communication approach has been largely influenced by the writings of Bateson (1951). Following a systemic approach, Bateson focused on relational processes and interaction instead of individual attributes. This transactional view influenced the later work of Watzlawick, et al. (1967) in the classic text *Pragmatics of Human Communication*. According to this perspective, relationships are defined as "two or more communicants in the process of or at the level of defining the nature of their relationships" (p. 121).

Pragmatic study does not endeavor to explain why an individual behaves in a certain way but instead focuses on the behavior and how it affects the interaction between the participants. A telling question from this perspective might be, "What do the participants' sequences of behavior say about their relationship?" Of primary interest here is the command or relational level because it is at the command level that we define ourselves in relation to the other, and through ongoing exchanges with the other we define our relationship. The relational communication model will serve as one theoretical and methodological framework for the present study of mother-adolescent daughter interaction. The means of operationalizing the tenets of relational communication are systematically embodied in the Relational Communication Control Coding System

(RCCCS). The workings and uses of the coding system will be detailed in the next section.

Relational control. In a quest to develop a dynamic language of interpersonal relationships, Millar and Rogers (1987) conceptualized a model of the basic relational dimensions of interactive systems. They identified three basic dimensions inherent in the process of social systems negotiating proper distance among members. The three dimensions of the distancing process are intimacy, trust, and control; however, control has been singled out as "the most basic and dynamic of the three" (p. 120). Relational control has been examined in various settings such as family therapy (Wuerker, 1994) and large organizations (Fairhurst, Rogers & Sarr, 1987), however the marital relationship has been looked at the most (Escudero, Rogers, & Guiterrez, 1997; Rogers, 2001). Research thus far has concentrated on how patterns of control are related to various characteristics associated with different marital types. Little to no research has been reported on the mother-adolescent daughter relationship using the relational perspective.

Even though many researchers acknowledge control as a relational variable rather than an individual characteristic, it is still mostly measured at the individual level (Berger, 1985). Rogers-Millar and Millar (1979) have argued that control is not something to be possessed, but is a process negotiated during social interaction. The relational communication perspective provides an opportunity to observe how control is thus negotiated in relational interactions.

Millar and Rogers (1987) defined control as the "process of establishing the right to define, direct, and delimit the actions of the dyad at the current moment" (p. 120). Thus,

the negotiating of relational control becomes evident through the observation of behavioral patterns in which participants make attempts to attain, neutralize, or relinquish control. Control is therefore measured by the actual change of behavior in response to the influence of the other. This measure of control accounts for the dyadic nature of the communicative process and emphasizes the importance of the conversation, not just the possession of static resources related to power. This definition has expanded the concept of control to include behaviors, not just perceptions, and has earned high praise for its contributions to our understanding of relational control:

> We feel this research program (relational communication control) offers an alternative way of viewing communicative interpersonal influence and attempts to study communicative influence in a manner that many communication scholars verbally support but methodologically ignore, that is, communicative influence as processual, transactional, and relational. (Siebold, Cantrill, & Meyers, 1985, p. 587)

It was further noted that "Rogers and Millar's work remains one of the most cogent and heuristically valuable statements about relational communication and provides a concrete extension of the Interactional View developed by Bateson and followers" (Littlejohn, 1989, p. 177).

The Relational Communication Control Coding System. The Relational Communication Control Coding System (RCCCS) is an interactional method developed by Rogers (1972b) and Rogers and Farace (1975) that indexes the control dimension of relationships. Dyadic interaction is analyzed by coding each message in an ongoing conversation according to the regulatory function of the message. Each utterance is assigned a three-digit code. The first digit identifies the speaker. The second digit represents the grammatical form, and the third digit describes the response mode relevant to the preceding message. Control directions of one-up, one-down, and one-across are

then assigned to each coded message. A message that attempts to assert control in defining the relationship is coded as a one-up (↑) move. The submission to or acceptance of the other's message is coded as a one-down (↓) move. A neutral message that progresses the conversation is coded as a one-across (→) message. Because a transact is the minimum unit of analysis in the RCCCS, the control moves are combined to form message exchange sequences that can be interpreted as a pattern.

The basic measurements of control are domineeringness, dominance, and redundancy. Domineeringness is a monadic measure of individual one-up messages. The proportion of a person's one-up messages in relation to his or her total number of messages will determine how domineering that person is (domineeringness = ↑/total number of maneuvers). The measure of dominance occurs at the dyadic level and refers to the number of control asserting messages (one-ups) made by one person that are responded to by submissive messages (one-downs). The more one-up assertions that are accepted, the more dominant that person is, in that relational context at least.

Redundancy refers to the amount of repetition in the interactional pattern. Redundancy depicts "the amount of alteration in the participants' pattern of constraint; or stated another way, to the variability in their negotiation over definitional rights" (Millar & Rogers, 1987, p. 120). Highly redundant control patterns are inherently very rigid, whereas more flexible control patterns are said to have more transactional variability. Redundancy, domineeringness, and dominance will be measured in this study in relation to mother-adolescent daughter satisfaction.

Control patterns. "The overarching goal of the study of relational communication has been and remains the search for patterns of human interaction" (Courtright, Millar, &

Rogers, 1983, p. 47). The study of observable behavior patterns allows the researcher to identify how the sequential nature of patterns affects relationships (Millar & Rogers, 1987). Sequential analysis not only allows for expansive descriptions of interactions but also can offer insight into the processual nature of interpersonal relationships. Thus, individual messages are not as telling as ongoing exchanges of messages that form patterns.

Patterned behavior can be measured in many ways, one of which is to look for equality or difference in the types of messages offered (Watzlawick, et al., 1967). Bateson's (1951) idea of symmetry and complementarity represents such patterns. In symmetrical patterns, differences are minimal because similar types of messages are exchanged. The result is similar to a mirroring effect. Complementary patterns consist of messages that are maximally different which complement each other.

Symmetrical and complementary patterns both represent patterns of control. Symmetrical patterns are characterized by either both individuals asserting control, both being submissive, or both maintaining neutrality. Complementary patterns may take one of two forms. The pattern may start with one partner asserting control with a one-up message and the other accepting the assertion by responding with a one-down. Or, the exchange may begin with one partner's submissive statement to which the other responds with an assertion of control.

Symmetry and complementarity cannot be determined by an individual message but at a minimum of one transact. However, these patterns become more pronounced by observing a series of connected transacts. One pattern is not necessarily preferable over another. A combination of complementary and symmetrical patterns is believed to be

present in most healthy relationships (Watzlawick, et al., 1967) and flexibility between patterns is associated with functional and satisfying relationships (Courtright, Millar, & Rogers, 1980). It should also be noted that the constructs of complementarity and symmetry are not the only possible patterns for study, but they offer a prototype for beginning to look at patterns relationally (Rogers, 1981).

Control patterns in marital research. While less is known about the dynamics of control patterns in mother-daughter relationships, findings from the marital relationship may offer comparison for other family relationships. Relational communication studies of marriage have concluded that flexibility of pattern appears to be a key element in relation to both marital satisfaction and dyadic understanding (Courtright, Millar, & Rogers-Millar, 1979). Marital dyads have been compared with manager-subordinate dyads and have been found to be far more flexible in their communication patterns (Fairhurst, et al., 1987). One factor that influences more flexible transaction patterns is a high occurrence of domineeringness. It has been suggested that a higher frequency and resistance to definitional bids encourages more unpredictable patterns. Whereas husband domineeringness was found to encourage more flexible control patterns and less transactional redundancy (Courtright et al., 1979; Rogers-Millar & Millar, 1979, wife domineeringness does not seem to fully enjoy the benefits of control pattern flexibility due to the decrease in satisfaction for both spouses.

Talk-overs, both successful and unsuccessful, have been associated with domineering behavior. A talk-over is any "verbal interruption or intrusion made while the other person is talking" and is considered successful if the other "yields the 'floor' to the interrupter who continues to talk" (Rogers-Millar & Millar, 1979, p. 245). Although a

correlation between domineeringness and talkovers exists for both husbands and wives, it appears that domineering wives interrupt more than domineering husbands (Courtright et al., 1979; Rogers-Millar & Millar, 1979). The only relationship between talk-overs and dominance was in the case of husband dominance, which was correlated with fewer successful talk-overs.

Patterns of one-up complementarity with relatively equal patterns of dominance have been found to be more satisfying to marital partners (Courtright et al., 1979). However, when one partner was consistently more dominant, the satisfaction level dropped as well as the level of dyadic understanding, particularly the understanding level of the dominant partner. Patterns of competitive symmetry and one-across symmetry were more frequent in couples with high role inequity. These couples displayed fewer one-across/one-down transactions. This study investigates the above types of associations in mother-daughter relationships to determine if similar control patterns appear to define this subsystem of the family. Given the established structure and expectations inherent in parent and child roles, it is conceivable that mothers may negotiate a more dominant relational position, although considering the increased desire for autonomy known to occur in adolescence, daughters may exert more domineering attempts that offset the dynamics of control.

Relational support and nonsupport. According to the Relational Communication Control Coding System (RCCCS) a message indicates support if it "offers or seeks agreement, assistance, acceptance, encouragement, approval, etc." (Rogers, 1972b, p. 5). A message of nonsupport "opposes via resistance, rejection, disagreement, demand or challenge" (p. 6). A supportive or nonsupportive utterance can take the form of a question

or a statement. As with the measurement of control, determining whether a message is supportive or nonsupportive depends on the preceding message(s), and therefore requires at minimum, one transact.

It is important to note that in the RCCCS, support and nonsupport messages are distinguished from what have been termed an "extension" message, or a message that "continues the flow or theme (not always the precise topic) of the preceding message" (Rogers, 1972b, p. 6). Because an extension message continues the flow of the conversation, and often adds to the previous statement, it can feel supportive in nature. In order to keep the categories of support and nonsupport "pure," messages must clearly and unquestionably meet the established criteria of the support and nonsupport definition, otherwise, they are coded as extensions.

Support and nonsupport as just defined are comparable to confirmation, rejection, and disconfirmation, as well as Gottman's (1994) notion of positive and negative messages, although differences must be noted. From his extensive marital database, Gottman has concluded that in order to maintain a healthy and satisfying marital relationship, positive moments of "mutual pleasure, passion, humor, support, kindness and generosity" must outweigh the negative moments of "complaint, criticism, anger, disgust, contempt, defensiveness, and coldness" (p. 221). Gottman has further quantified the necessary balance as a ratio of five positive interactional gestures to every one negative interactional gesture. In striking contrast, unstable marriages maintained a ratio of .8 positives to every one negative. Whether the 5:1 ratio serves a similar function in parent-child relationships is not yet known. The Couples Interaction Scoring System (CISS) developed by Gottman and colleagues (Gottman, Notarius, Markman, & Mettetel,

1977) differs from other coding systems primarily in its separation of the content (verbal) dimension, and the affect (nonverbal) dimension of messages. Therefore, the CISS attends to thought units, which are verbal acts, as well as affect and context codes, which are nonverbal behaviors. By comparison, the RCCCS attends to units of utterance or turn, not thought units. Therefore, the ratio of support to nonsupport messages for satisfied couples using the RCCCS was 3:1, which is expectedly smaller due to the disproportionate number of units evaluated.

Control patterns and support/nonsupport in marital research. Previous studies have found that higher levels of wife domineeringness were associated with lower levels of marital satisfaction for both spouses (Rogers-Millar & Millar, 1979; Escudero, et al., 1997, Rogers & Escudero, 2004). This may be explained by the related finding that wife domineeringness was negatively associated with support statements. Thus, wives one-up attempts are rarely accompanied by a support statement to husbands. Although there has been no evident relationship found between husband domineeringness and marital satisfaction, moderate levels of husband dominance were related to higher marital satisfaction (Rogers-Millar & Millar, 1979). No such relationship was found to exist between wife dominance and marital satisfaction. Similarly, Kolb and Straus (1974) found a correlation between marital happiness and wives' acceptance of husbands' control messages but not the other way around. It should be noted, however, that marital satisfaction decreases as the inequality of dominance increases.

A high correlation was originally found between nonsupport statements of both husbands and wives and husband domineeringness (Rogers-Millar & Millar, 1979). It appeared that wives offered significantly more nonsupport statements (i.e., rejections,

disagreements, demands) when the husband was domineering than the husband did when the wife was domineering. Overall, a higher frequency of nonsupportive messages were associated with domineeringness than with dominance. A similar study concluded that domineeringness in general was inversely related to marital satisfaction, although no consistent relationship was found between domineeringness and nonsupport statements (Courtright, et al., 1979). Instead, a high level of domineeringness seemed to correlate with a decrease in support messages without an increase in non-support messages, implying that couples tended to avoid negativity while at the same time withholding support, setting up something of demand-withdrawal pattern.

Marital research in distressed and nondistressed couples. The following studies looked at the differences in control patterns and support/nonsupport messages between distressed couples and nondistressed couples. Gottman (1979) found that distressed couples can be distinguished from nondistressed couples by the number of negative affect messages they express; however, Gottman (1982) later observed that husbands in distressed marriages are less emotionally responsive and tend to withdraw, whereas distressed wives are more argumentative. He thereby concluded that even more telling than the number of negative expressions is the pattern of reciprocity in those expressions (Gottman, 1994).

However, a study of Spanish couples found that negative reciprocity did not distinguish clinic couples from nonclinic couples' conflict interactions, nor did patterns of competitive symmetry (Escudero, et al., 1997). Instead, more neutral patterns of control and neutral affect reciprocity were greater factors of distinction. For example, nondistressed-nonclinic couples utilized patterns of one-down/one-across control far

more than distressed-clinic couples. This type of pattern represents a transaction of agreement or support followed by a message intended to add to or continue the conversation, thus keeping the interaction in a more steady and neutral progression. This transitory pattern of one-across/one down has consistently been found to be related to couples' marital satisfaction (Rogers, 2001).

A study by Manderscheid, McCarrick, Rae, and Silbergeld (1982) found distressed-clinic couples were more likely to follow a one-down statement with another one-down or a one-up response. These researchers observed that couples in therapy enact sequences of competitive symmetry following both one-up and one-down control moves, although one-up moves led to more rapid escalation whereas one-down moves escalated gradually. One-across statements resulted in less competitive sequences altogether.

In terms of communicative exchanges during conflict, in the initial phases, nondistressed couples were found to use more validating messages and fewer cross complaining messages than distressed couples (Fitzpatrick, 1984). In contrast, Gottman (1994) found that angry exchanges made both spouses unhappy during the actual conflict, but correlated with long-term satisfaction.

Escudero, et al. (1997) reported that nondistressed-nonclinic couples experienced balanced and variable patterns of affect reciprocity. These couples could alternate between positive, negative and neutral affect expressions while clinic couples could not alternate as much or as easily. For example, clinic couples could only express a one-up message with negative nonverbal affect. Clinic couples in general seemed to be less responsive and connected with one another compared to the more fluid interactions of nonclinic couples.

Overall, clinic couples displayed greater variance in their control patterns except for the more frequent occurrence of competitive symmetry and negative one-across/one-up patterns. Although nonclinic couples did engage in competitive negative symmetry as well, they could more easily deescalate from that pattern and move the conversation toward a competitive neutral symmetry. Clinic couples seemed more bound by their redundant negative patterns and lacked the flexibility to alter the pattern. Overall, the communication patterns used by distressed couples in comparison to nondistressed couples provide insight to the constructive handling of conflict, "a process considered to be at the heart of maintaining viable, long-term marital relationships" (Escudero, et al., 1997, p. 27).

This review of relational communication literature highlights the scholarly, clinical, and practical contribution that has been made within interaction research and especially in understanding the marital relationship. In particular, research on the dimensions of control and support have afforded insights into the process of regulating interpersonal distance and intimacy. This study expands that knowledge in at least two ways: first, in the application of relational communication to mother-daughter relationships; and second, in the methodological combining of the Relational Communication Control Coding System with a qualitative analytical approach. A review of the qualitative background and relevant literature will be provided next.

Qualitative Interaction Analysis: Theoretical and Conceptual Approach

Qualitative research offers a means to examine relational experiences in a systematic and intuitive way, allowing researchers to render interpretations of participants' meanings and behaviors. Observation is paramount, as is the analytical

process of carefully and thoroughly reviewing transcripts looking for themes, common patterns or structures of meaning or behavior, and shared interpretations. Qualitative methods do not necessitate researcher immersion in the site or culture at large, but allow access to the phenomenon of study through an intensive investigation of interaction processes.

An important contribution of this study is the extending of traditional relational control measures to include qualitative analysis, an expanded approach capable of more vividly depicting behavior that is patterned enough to reify itself as stable and empirical. Looking at the data in this way encourages a more holistic view of interaction as evolving, dialogic, and situated co-constructions. Ultimately, the goal of this approach is to uncover subtle nuances of interaction that provide additional detail and insight into interaction processes. Because qualitative observation allows one to see things one wouldn't otherwise see and may not even think to ask (Lindlof & Taylor, 2002), the resulting analysis promises an enhanced and layered account of the interactional "dance" (Rogers & Escudero, 2004) of patterns and behavioral movement, along with greater understanding of the construction and meaning ascribed in the dance. To that end, this study endeavors to make a notable methodological contribution as well as to broaden the existing realm of content knowledge:

> For instance, when and in what situations is too much complementarity or symmetry problematic, when is competitive symmetry functional, what patterns precede successful interventions, what types of control moves alter escalating sequences, which tend to facilitate negotiated resolutions, are among a host of targeted questions that interaction research can and has addressed. (Rogers & Escudero, 2004, p. 231)

The qualitative interaction methodology employed in this study is patterned after a case comparison method applied by Fairhurst (1993) that focused on discourse patterns

of 22 organizational members. Comprised of six female leaders and sixteen male and female members, she examined how leader-member exchange was accomplished and what part gender played in the process by interpretively drawing on examples from dyadic conversations to identify specific communication patterns and distinctive features of interaction, and the rules under which they operate. Unlike typical ethnographic research that places emphasis on holistic cultural representations, her approach focused more exclusively on discourse patterns. Procedurally, analysis was based on watching videotapes and reviewing transcripts for examples and counter-examples of distinguishing features of behavior, discourse, and pattern. Constant conversation comparisons produced 12 discourse patterns that effectively distinguished between high, medium, and low leader-member exchange relationships, and further sought to explain the role of gender in each outcome group. More will be said in the next chapter about the adaptation of this procedure to the present study.

Change Event Research

The Family Relational Communication Control Coding System (FRCCCS) was developed as an extension of the RCCCS (Rogers & Farace, 1975). The essential purpose of the coding system is to analyze conversations in terms of interactors' attempts to gain or relinquish control vis a vis one another. The FRCCCS differs from the original coding scheme in its capacity to code triadic moves such as intercepts, indirect disconfirmations, and coalition moves (Heatherington & Friedlander, 2004). The FRCCCS also extends the original coding scheme to more definitively account for nonverbal behavior. The majority of research utilizing the FRCCCS has been conducted in family therapy settings. From

this research, a conceptually significant process has been studied and noted for its heuristic and applied value.

Originating as a psychotherapeutic strategy, *change event research* (Greenberg, 1986, and explicated in Heatherington & Friedlander, 2004) assumes that certain episodes during the therapeutic process are more significant than others in their potential to evoke change and achieve closure during the therapeutic session. *Episodes* are identified as having a beginning phase, a middle phase, and an ending phase. The beginning, or marker phase, is one in which the therapist initially engages the client's or family's problem(s). In the middle phase, the difficult process of working through the problem is negotiated, and in the end or resolution phase, there is an observable change in the state of the problem, which indicates that the middle phase was indeed accomplished.

Change event research, as it has been applied in the therapeutic environment, remains a rather tidy procedure. The family is skillfully navigated through each progressive phase by a clinical expert whose involvement likely increases the family's ability to not only reach an end phase, but to actually achieve meaningful resolution. However, much less is known about change event processes as they occur in everyday interactions of families not in therapy. Given that a majority of families cannot or choose not to work through their problems with the assistance of a trained therapist, they are left to their own communicative devices to achieve resolution or not. Conceivably, without clinical intervention, some families could remain perpetually tossed back and forth in a relational eddy that revolves between a recurring marker phase and an ineffectual middle phase. Much can be gained by uncovering the behaviors, patterns, and changes in patterns that propel nonclinical family relationships through turbulent waters toward the safety of

shore, or at least calmer waters. Herein, a dual approach incorporating relational coding and qualitative interaction analysis could vitally inform the important question of how change events unfold in the problematic episodes of mother-daughter dyads outside of the therapeutic context and in the manner most families actually experience them. Layering qualitative analysis over codified interaction data is a promising and underutilized means of integrating interpreted analysis with observed patterned behavior.

Research Questions

This review of the literature has established that relational control, conflict, support and nonsupport are integral communication components affecting relational satisfaction. It has also established that the relational communication approach, enhanced by qualitative interaction analysis, is a methodologically promising avenue toward expanding our present understandings of relational control, conflict, support, and satisfaction in the mother-adolescent daughter relationship. Additionally, given that there appears to be little or no research specifically applying relational communication and qualitative interaction analysis to this specific relationship, this study stands to contribute both theoretically and empirically in expanding our knowledge of this relationship.

Several significant interaction patterns have been identified in earlier relational communication research, particularly in husband-wife dyads. While obviously a distinct relationships, particular attention should be paid to established marital patterns in that they serve a valuable comparative function for other family relationships. Whether similarities exist in behavior patterns and related satisfaction between various family dyads stands to benefit dyadic relationships as well as our understanding of greater family processes. To that end, the first research question is put forth:

RQ1: What overall patterns of relational control are exhibited in mother-adolescent daughter interactions?

Studies have linked parental support and confirmation with adolescent openness, willingness to disclose, positive identity, and feelings of greater self-efficacy (Dailey, 2006; Ellis, 2002; Laing, 1961; Satir, 1967; Sieburg, 1985). A climate of confirming messages is thought to encourage relational members to elaborate on their experiences, thoughts, and feelings, thereby promoting relational openness. Presumably, feelings of relational satisfaction and closeness would accompany supportive, confirming messages, although this has not been measured as such in mother-adolescent daughter relationships. Alternately, sustained negative interactions, such as those found in relationships high in conflict have been linked with adolescent depression, low self esteem, and poor overall adjustment (Caughlin & Malis, 2004; Cole & McPherson, 1993; Crouter, Bumpus, Maguire, & McHale, 1999; Robin & Foster, 1989). Still, some research points to cognitive and individuating benefits that come from conflict (Graber & Brooks-Gunn, 1999; Holmbeck & Hill, 1991; Steinberg, 1990; Smetana, 1989).

The accumulation of harmonious and conflictual interactions creates a relational climate influencing each individual's degree of satisfaction with the relationship. Isolated messages can be impactful on their own, however, compelling evidence exists of the resounding influence of relational climate on children's development (see Noller, 1995) as well as marital satisfaction (Gottman, 1994), and thus potentially, parent and adolescent child satisfaction. Relationship satisfaction is a standard measure of interpersonal relationships often used to assess the quality of dyadic communication. In the present study, assessment of relationship satisfaction is expanded to include a measure of relational closeness and perceived support. Details of the Satisfaction-

Closeness-Support (SCS) measure will be explained in Chapter 3. Of particular interest is how relational satisfaction, closeness, and perceived support relate to relational control patterns and expressions of relational support and conflict. Thus, the second research question is proposed:

RQ2: What are the differences in relational control patterns between higher and lower SCS mother/adolescent daughter dyads?

One means by which the present study attempts to enhance the analytical texturedness of the data is through a qualitative assessment of patterned behavior, change event episodes (Greenberg, 1986, Heatherington & Friedlander, 2004), and turning points such as those more commonly analyzed in therapeutic processes. An important difference here, however, is that episodes unfold according to participants' communicative choices, uninfluenced by therapeutic or researcher intervention. In this sense, ways in which mother-daughter dyads engage in disagreement, respond to criticism or conflict, offer and accept support, talk through problems, and achieve resolution or not, all by their own design, can shed light on behavioral interactions as they occur in everyday family conversation. Significant behavioral maneuvers such as repair attempts and conflict triggers, identified through systematized RCCCS graphing as well as exploratory processes using the case comparison method (Fairhurst, 1993), serve as helpful markers for identifying patterned behavior, turning points, and change event episodes. The case comparison method, as described previously, facilitates a type of interpretive analysis of identified behavioral maneuvers and episodes. A layered approach such as this enables the individual strengths and combined utility of observation and qualitative research. To this end, a third research question is proposed:

RQ3: What behaviors (or patterns of behavior) distinguish patterned behavior and change event episodes, both as identified through the RCCCS and qualitative interaction analysis, and do these behavioral patterns or episodes differ for higher and lower SCS mother/daughter dyads?

The methodological procedures for answering the above research questions and analyzing the mother-daughter interactions will be presented in the next chapter.

CHAPTER 3

RESEARCH METHODOLOGY

The purpose of this research study is to investigate the communicative behavior of mothers and adolescent daughters in conversation utilizing the relational communication perspective and methodology, coupled with qualitative interaction analysis. This chapter outlines the methodology used in accomplishing this objective. A description of the research context and participants is provided, followed by an explanation of the data collection procedures and instruments used in this study. Measurement and analysis processes for self-report data and interaction data will also be discussed.

Research Participants

Forty mother and adolescent daughter dyads (n=80) were recruited from several counties in and surrounding the Salt Lake valley. Participants were most often recruited through networking as well as via flyers distributed at numerous demographically diverse high schools and community centers. In order to participate, mothers and daughters were required to be biologically related and live in the same household. Adolescent daughters ranged in age from 14 to 18 years old. To avoid duplication of data only one daughter per family could be included in the study. While socio-economic demographics were not collected, household artifacts and conversational cues suggested that the sample roughly reflects the religious and racial profile of the state at large, with just over half of

participants identifying as members of the state's dominant religion, The Church of Jesus Christ of Latter Day Saints, with others of the sample identifying as Catholic, Greek Orthodox, Protestant, and of no religious affiliation. In terms of race, a majority of participants appeared to be Caucasian, with a smaller number appearing Hispanic, Asian, Greek, and of Pacific Island descent. Socioeconomically, participants resided in homes and neighborhoods that generally ranged from lower middle class to upper middle class. Participation in the study was voluntary and no compensation was offered.

Data Collection Procedures

This study utilized self-report data in the form of a brief questionnaire as well as interaction data in the form of a face-to-face conversation videotaped in participants' homes. Prior to the videotaping session, the researcher contacted each participating dyad by phone and email to explain the research procedures, consent forms, time requirements and to schedule a time for the videotaping session. Following the phone conversation, a packet including a written explanation of the research procedures, IRB consent forms, and a questionnaire including demographic information was sent to participants (see Appendices A-C for participant letter, consent forms and questionnaire). Mothers and daughters were instructed to complete the questionnaires as soon as possible upon receiving the packet, the objective being to allow time between the survey and taped conversation in an attempt to minimize the potential influence one may have on the other. Pairs were instructed to complete the questionnaire in a separate room from one another, seal them in a separate envelope provided by the researcher, and not discuss the questionnaire until after the videotaped conversation. Details of the questionnaire and scale used, as well as interaction videotaping procedures are discussed in the next section.

Mothers and daughters were invited to ask questions at any time during the research process and were given a contact number and email address to communicate with the researcher as needed.

Self-Report Instrument

As indicated above, mothers and daughters were asked to complete a survey about their relationship with each other. They were instructed to complete the questionnaire in separate rooms so as to prevent potential influence or self-consciousness. Completion of the survey took approximately 5 to 10 minutes. The participants' surveys were returned to the researcher at the beginning of the home visit. Participant names were replaced with identification numbers and pseudonyms have been used to protect anonymity.

The instrument administered to measure the quality of the mother and daughter relationship was a version of The Network of Relationships Inventory (NRI) (Furman & Buhrmester, 1985). The original NRI scale consists of 36 items designed to assess participants' perceptions of their closest relationships, although for this study the items were adapted to inquire about the mother-daughter relationship. The items are rated on a 5-point Likert scale (1 = little or none to 5 = almost always). Certain items solicit general relationship information (e.g., "How much free time do you spend with this person?") while other items pertain to specific relationship features. When the scale is used in its entirety, respondents report on 10 features of relationships derived from a theory by Weiss (1974) who hypothesized that individuals seek these specific social provisions in their personal relationships. The 10 features are organized around two prevalent relationship factors designated as Social Support (comprising seven provisions) and Negative Interaction (comprising three provisions). Social Support is cumulatively

assessed through the following seven provisions, each of which addresses three questions: Companionship, Support, Intimacy, Nurturance, Affection, Admiration, Satisfaction, and Reliable Alliance. The Negative Interaction dimension is assessed by three questions each about the following three provisions: Conflict, Punishment/Antagonism, and Relative Power of the child and other person (in this case, the mother).

Other studies have used condensed versions of the NRI scale, excluding provisions that did not directly contribute to the focus of the study (Laursen & Mooney, 2008, Laursen; Furman & Mooney, 2006; Furman & Buhrmester, 1992). Following that precedent, the present scale included questions from four of the seven Social Support provisions (Intimacy, Nurturance, Affection and Satisfaction), three Negative Interaction provisions (Conflict, Punishment/Antagonism, and Relative Power) and three general information questions. Examples of questions from the Social Support provisions include "How happy are you with the way things are between you and your mother/daughter?" and "How often do you share your secrets and private feelings with your mother/daughter?", while examples of questions in the Negative Interaction category include "How much do you and this person disagree and quarrel?" and "How much do you and this person hassle or nag one another?" General information questions probe relationship norms such as "How often do you go places and do enjoyable things with your mother/daughter?"

Reliability and validity of the NRI and subcategories have been previously established as satisfactory with Cronbach's alphas of the 10 scales achieving a typical mean of .80, and the factor scores of social support and negative interaction achieving

mean alphas > .90 (Furman, 1996). In the present study, psychometric analyses revealed that the internal consistencies of the scale scores were acceptable, Cronbach's alpha for the NRI Social Support provisions = .88, and for the Negativity provisions = .94. Alphas for the following subcategories were all satisfactory: Intimacy alpha = .86, Satisfaction alpha = .93, Nurturance alpha = .86, Conflict alpha = .90, Antagonism alpha = .89, Relationship Norms alpha = .91. The subcategory Affection was the only provision with an unacceptable alpha of .59 and was therefore eliminated from the scale. Factoring by item did not increase alpha. As well, a low alpha in the original three-item Nurturance scale resulted in the exclusion of one question, making Nurturance a two-item scale and increasing alpha from .68 to .86.

A comparison of scores using a t-test on variables "Social Support" and "Negative Interaction" revealed no difference between Mother and Daughter responses (both reporting $p > .34$). Scatterplot and correlation tests on variables "Social Support" and "Negative Interaction" confirm a negative correlation ($r = -.367$, $p = .001$) indicating that a decrease in negativity is associated with an increase in social support. A scatterplot of participant responses illustrates slightly greater density among "Social Support" scores than "Negative Interaction" scores. Further, instances in which high social support scores corresponded with high and low negativity scores suggest that as social support and negativity can function together in relationships.

Correlation tests between Mother and Daughter participants revealed no group differences on any Social Support variables (for all scores, $r < .12$, $p > .3$) with the anticipated exception of the Nurturance subcategory wherein daughters reported feeling more nurtured by their mothers than mothers did by daughters ($r = -.442$, $p < .001$).

Neither subcategory within the Negativity provision was significant, suggesting that mothers and daughters see negativity in their relationship differently. Based on these analyses and the fact that the NRI considers Social Support and Negativity distinct relationship functions, the present study's utilization of the Social Support factors to index dyadic differences without the accompanying Negativity provision is justified.

Thus, the NRI Social Support scale was refined to include a total of eleven items comprising the Social Support subcategories of Intimacy (three items), Nurturance (two items), Satisfaction (three items), and Relationship Norms (three items). Scores from these four provisions comprehensively assessed relationship adjustment and overall well-being. As named above, the breadth of subcategories used in the revised scale represent more relational dimensions than Social Support alone. For purposes of the present study, the revised scale was thereby renamed to more accurately reflect the provisions measured, namely, Satisfaction (Satisfaction provision), Closeness (Intimacy provision), and Support (Nurturance provision). The modified 11-item self-report measure adapted from the NRI Social Support category will hereafter be referred to as the Satisfaction-Closeness-Support (SCS) scale.

Satisfaction-Closeness-Support (SCS) scale analysis. SCS scores were calculated for mothers and daughters separately and as a dyad. Mothers' SCS scores ranged from 1.55 to 4.64 with a mean of 3.65. Daughters' scores were slightly higher with a range of 2.36 to 4.91 and a mean of 3.81. Dyadic mean scores ranged from 2 to 4.69 with a mean of 3.73, yielding a relatively balanced division between higher and lower SCS scores. Using a median split to divide the groups was not possible due to the median score being shared by three dyads. Additional factors were therefore considered in determining

whether to include the three dyads with the higher or lower satisfaction group. Transcripts of the three dyads in question were reviewed in terms of their content and tone to see if the interaction suggested signs of more or less support, intimacy, and satisfaction. Indeed, frequent expressions of heated disagreement and mutual displeasure occurred in all three dyads which seemed to warrant their placement in the lower satisfaction group. T-tests verified that significant difference existed between the groups in either distribution (18 High/22 Low or 21 High/19 Low), so given the oppositional tone of the interactions, the mother-daughter dyads were divided into two groups with eighteen Higher SCS dyads ($\bar{x}$ = 4.25) and 22 Lower SCS dyads ($\bar{x}$ = 3.31), $t(38) = 7.10$, $p < .001$).

Interaction Data Procedures

The second type of data collected was interaction data in the form of a video- and audio-taped conversation between mother and adolescent daughter dyads. In an effort to encourage an environment as natural and familiar to participants as possible, videotaped interactions between mothers and daughters took place in participants' homes. Upon arrival at their homes, the researcher collected all signed IRB consent documents and surveys. The researcher set up a videocamera and audio-cassette recorder and videotaping procedures were reviewed with the dyad. Mothers and daughters were invited to sit in a room of their choosing, with most opting for the living room or family room, and some choosing the kitchen table or the mother's bedroom. Mothers and daughters were asked to speak with each other and not to the videocamera or as if to the researcher. Participants were told that the study was geared to look at how mothers and daughters interact in everyday conversations. They were encouraged to converse in ways that felt natural for

them without feeling a need to "please" the researcher or second-guess the researcher's agenda. Pairs were asked to discuss four topics, one at a time, relevant to mother-daughter relationships. With videocamera running, the researcher posed the first topic then left the room to allow the pair to converse alone. They were asked to discuss each question for 8 to 10 minutes and call the researcher when they were ready for the next topic.

The four topics posed in this study are variations of topics that have been used in similar studies (Millar, et al., 1979; Penington, 2004; Rogers & Farace, 1975). Topics were phrased as discussion questions and some included a brief transition statement to help participants understand the changing context of each question. Questions asked were as follows:

1)How do you spend time together?

2)For many teenage girls, challenges with friends, family members, or teachers are not uncommon. Will you talk together about a problem that you (daughter) are currently facing with someone in your life, other than your mother.

3)Disagreements are fairly typical between parents and children, and sometimes, particularly between mothers and teenage daughters. Will you talk with each other about something you don't see eye to eye on?

4)What do you think it takes to have a good mother-daughter relationship, during the teen years especially?

At the conclusion of the videotaped discussion, the researcher informally debriefed participants, seeking their initial reactions to the exercise and their view as to how authentic this conversation felt to them compared with other conversations. The majority of dyads reported that the conversation did in fact feel natural, especially after the first few minutes of videotaping, and that the experience was "interesting" and "enjoyable." Of those, some indicated that it was "not as bad" as they had expected it to be while

others, particularly mothers, appeared energized and expressed gratitude for the opportunity to participate. While fewer in number, some pairs did not enjoy the experience. Negative feedback from these dyads came mostly from daughters and ranged from silence to irritation, with one daughter uttering soberly, "That was painful." Nearly all mother-daughter pairs agreed that the topics posed were relevant and typical of subjects they discuss, the primary difference being the context in which they get discussed. Most indicated that having sit-down, face-to-face conversations was not as common as talking in the car or while doing household tasks. After a few minutes of debriefing and packing equipment, the researcher thanked the mother and daughter for their participation and the home visit was concluded.

Recordings of each conversation were transcribed by the researcher and an independent transcriber according to the RCCCS Coding Manual (Rogers, 1972b). Details of the interaction, verbal and where relevant, nonverbal, were conveyed through precise notation of exact words, pauses, interruptions, incomplete utterances, tones of voice, sighs, etc. Conversations were transcribed at the level of the speech turn, regardless of the length of the turn. Less substantive utterances, characterized as backchanneling, were distinguished as a speech turn. Completed transcriptions were reviewed by the researcher to ensure accuracy and consistency in format and substance.

Data Analysis

Analysis of the data was predominantly guided by the relational communication perspective, and expanded through the use of interpretive methods and analysis. The following sections outline the coding and evaluation procedures utilized by each. Transcribed interactions were coded following the Relational Communication Control

Coding System (RCCCS). Developed by Rogers (1972b) and often used to analyze audio- and video-taped conversations, the RCCCS is a behavior-coding scheme in which patterns of communication control can be measured at the relational level. Contextual descriptors, such as laughter, silence, talk-overs, and sarcasm, are indicated in the transcribed text to aid in the interpretation of meaning when coding. The coding process requires three steps to attain transactional measures. The first step is to assign a three-digit code to each message. The first digit indicates the speaker. In this case, mothers were indicated by a number one (1) and daughters by a number two (2). The second digit identifies the grammatical code. The six grammatical codes are (1) assertion, (2) question, (3) successful talk-over, (4) unsuccessful talk-over, (5) noncomplete, and (6) other. The third digit represents one of ten response codes: (1) support, (2) nonsupport, (3) extension, (4) answer, (5) instruction, (6) order, (7) disconfirmation, (8) topic change, (9) initiation/termination, and (0) backchannel.

In the second step, relational control measures are obtained by coding each dyads' messages in terms of message control direction. Following the RCCCS guidelines, the three-digit codes are translated into one of three possible control directions. One-up messages (↑) attempt to assert definitional rights regarding an aspect of the relationship. One-down messages (↓) request or accept the other's definition. One-across messages (→) are leveling in that they minimize asserting or accepting definitions (Rogers, 1972b).

The third step is to combine control direction codes to form sequential pairs in which transactional patterns can be identified. Operationally, a transact is defined as one partner's utterance followed by the other's response. The observed number and type of

transacts are indexed in terms of the sequential pairing of the dyads' one-up, one-down, and one-across movements.

Based on the coding system, a variety of descriptive measures are offered on the frequency, proportion and sequence of the three digit codes and control direction codes. Measures examined include domineeringness, dominance, conflict, support and nonsupport. The domineeringness score indexes each relational partner's proportion of one-up control moves. This index is derived from the number of an individual's one-up messages compared to their total number of messages. The dominance score is operationally defined as the number of one-up moves of one partner that are responded to with a one-down statement by the other partner. This measure is classified as a one-up/one-down (↑↓) complementary transact. The dominance ratio is obtained by dividing the mother's dominance score by the daughter's dominance score, which yields a comparative measure of the partners' dominance in the conversation. A dominance ratio close to one (1) indicates more equivalency in the negotiation of definitional rights. The dominance ratio for the sample overall assesses who, out of mothers and daughters, assumes a more dominant position. Dominance ratios for higher and lower SCS groups are also examined. Support and nonsupport are similarly measured.

Longer interaction sequences are examined to identify transactional patterns of relational symmetry, complementarity, and transitory. Symmetrical sequences depict three or more relationally similar control maneuvers such as competitive symmetry (↑↑↑), submissive symmetry (↓↓↓), and neutralized symmetry (→→→). Occurrences of competitive symmetry marked by three or more one-up exchanges, also termed conflict episodes, are of particular interest for their ability to identify and represent conflict

exchanges. Leveling episodes (→↓→↓ and ↓→↓→) are of interest in terms of the neutralizing effect they have been found to have on interactions. Evaluation of these and similar sequential patterns offers greater insight as to the presence and influence of complex configurations of control maneuvers in the relationship. To address Research Question 2, parametric measures including MANOVAs and *t*-tests were used to assess differences between higher and lower SCS groups.

Relational Communication Analysis

In accordance with previously established criterion (Courtright, et al., 1980; Rogers-Millar & Millar, 1979) dyads must manifest at least 55 transactions across the four topics to be included in this study. All of the dyads achieved well above the minimum, ranging from 140 to 744 transactions with an average of 424 transactions per dyad and 16,962 transacts total.

Forty transcripts were coded by three independent coders, two of whom were communication B.A. graduates and one a communication graduate student. The researcher trained the coders but did not participate in coding actual transcripts. Coders read the RCCCS training manual and attended training sessions in which concepts and procedures from the manual were reviewed and clarified. Multiple pilot transcripts were used to practice coding together and independently, and to test reliability. Intercoder reliability was assessed using Cohen's kappa (1960). After training sessions and coding "practice" transcripts, acceptable levels of reliability were achieved: Cohen's kappa for grammatical categories was .936 and kappa for response codes was .746. The researcher continued to monitor the coding process, answer questions, and clarify coding rules. To ensure that acceptable reliability was maintained and that coder drift did not occur, kappa

procedure was applied to fifteen percent of the transcripts, most occurring in the beginning half of the coding process and then again toward the end. Kappa levels remained consistent and even improved throughout the coding process.

Qualitative Interaction Analysis

The qualitative component of this study examined mother-daughter communication patterns through dyadic interaction analysis and comparison of conversational patterns and responses. In response to the call for studies that broaden RCCCS findings using interpretive analysis (Rogers & Escudero, 2004), this study extends the analysis of transaction patterns, change events, and episodes using a qualitative approach. While not adhering strictly to the case comparison method devised by Fairhurst (1993), many of the foundational principles and procedures were employed in the present qualitative analysis.

Following Fairhurst's (1993) methodology as outlined in the previous chapter, the researcher watched the videotapes and reviewed the transcripts multiple times looking for examples and counter-examples of distinguishing features of behavior, discourse, and pattern. This approach interpretively draws on episodes from dyadic conversations to identify specific communication patterns and distinctive features of interaction, and the rules under which they operate. Videotaped interactions were analyzed using the relational communication coding procedures to discern relational maneuvers and interaction patterns. Those findings were then compared to higher and lower SCS groups. Relational communication data was used to identify key conversational occurrences to be qualitatively analyzed. Sequential graphs of the ongoing relational interactions display systematic identification of turning points, transactional patterns, and episodes in the conversation. Following Fairhurst's (1993) model for qualitative discourse analysis,

transcripts were read repeatedly with an exploratory eye toward identifying patterns, turning points, and critical junctures that yield additional meaning, but that may not be discernable using the relational control coding system alone.

Because this approach is not concerned with psychological explanations or participants' subjective interpretations (Folger, 1991), participant input is not necessary for interpretation. Instead, meaning was derived by considering the function of the discourse unit in the context of the larger conversation as well as in relation to preceding and consequent discourse units. Conclusions drawn from the case comparison method were analyzed across dyads and in terms of higher and lower SCS groups, giving greater insight into conversational similarities and differences between more and less satisfied mother-daughter dyads.

The logical structure of the case comparison approach is upheld by drawing out compelling examples and counter-examples from the discourse. From this stance, "argument by example" (Fairhurst, 1993, p. 325) does not necessarily speak to the frequency or typicality of particular communication patterns but aims to define a range of communicative possibilities for the relational phenomena at hand. In this study, examples and counter-examples are offered primarily of transactions of interest as identified by significant RCCCS results and graphs, that may otherwise have been indistinguishable or less clearly understood using the coding system alone. Other phenomena considered include conflict triggers, conflict episodes, and successful and unsuccessful repair attempts. While each of these interaction phenomena can be considered operationally distinct, they often occurred in conjunction with each other, enhancing their analytical potency in explaining process.

Research Questions

What follows are the research questions that guided the analysis and the analytic procedures employed to investigate each. Given that the mother-adolescent daughter relationship has no precedent in relational communication research, the following question was posed to guide the initial interaction analysis:

RQ1: What overall patterns of relational control are exhibited in mother/adolescent daughter interactions?

Base-rate control frequencies were calculated for a number of basic descriptive measures such as message type, control direction, domineeringness, dominance, transactional patterns, support, and nonsupport. Additional attention has been given to other analytical opportunities that emerged through important findings and are discussed in later sections.

Sequential analyses of relational control patterns were also conducted using SDIS and GSEQ (Bakeman & Gottman, 1997; Bakeman & Quera, 1995) computer programs. These programs assess code frequencies as well as offer relational information in the form of sequential patterns. Sequential analysis compares the unconditional probability of a behavior with its conditional probability, offering a basic understanding of transitional probabilities in this relational context. Data were analyzed using the multievent and event sequence modes (Escudero & Rogers, 2004) to fully address the research questions. The GSEQ was also used to calculate transaction measures, specifically, symmetrical and complementary patterns. Relational control patterns for certain dyadic interactions are represented graphically (Escudero & Rogers, 2004) highlighting message sequentiality and a cumulative representation of control maneuvers. The program was also used to locate mother-daughter interaction patterns such as speaker-order directionality, episodes,

and change events. Research Question 1 was partially answered through the data generated from the sequential analysis. Additionally, GSEQ analysis also helped to identify and assess the presence and influence of various episodes including leveling episodes (↓→, →↓), submissive symmetry (↓↓↓), conflict triads (↑↑↑), and the influence of question usage.

An overarching question framing the present inquiry is to uncover which interaction behaviors and patterns are associated with relational satisfaction among mothers and daughters. Thus, the second research question is proposed:

RQ2: What are the differences in relational control patterns between higher and lower SCS mother-adolescent daughter dyads?

To address Research Question 2, comparisons were made between mother-daughter groups as categorized by higher and lower satisfaction, closeness, and support (SCS) scores. RQ2 was partially answered using the standard RCCCS calculations explained above for RQ1. For identifying differences, the RCCCS measures were assessed using t-tests to compare findings between higher and lower SCS outcome groups. Additional analyses such as a speaker-order directionality of dominance and support were conducted.

Taken together, RQ1 and RQ2 offer a comprehensive analysis of relational control in the mother-adolescent daughter context and expand established findings on relational control and satisfaction, closeness, and support, and generate definitive information about this relationship. The final research question expands upon certain findings established in RQ1 and RQ2 through the use of a qualitative approach:

RQ3: What behaviors (or patterns of behavior) distinguish patterned behavior and change event episodes, both as identified through the RCCCS and content analysis and do these behavioral patterns or episodes differ for higher and lower SCS mother/daughter dyads?

Qualitative research has been categorized as "any type of research that produces findings not arrived at by statistical procedures or other means of quantification… It can refer to research about persons' lives, lived experiences, behaviors, [and] emotions…" (Strauss & Corbin, 1998, p. 11). Analysis using qualitative methods is interpretive for the purpose of describing and explaining concepts and relationships as data sets and organizing them to develop a theoretical framework. Using this approach, points of interest in the data were identified using the RCCCS and GSEQ coding analysis and examined with a closer reading of the text and context surrounding points of interest. Properties, patterns, and nuances within the text were compared and considered, then elucidated further with detailed description and informed interpretation of each incident.

The case comparison approach patterned after Fairhurst (1993) guided a process of extracting compelling examples and counter-examples from the discourse, which illuminated new and unidentified behavioral repertoires and sequences, as well as pattern differences between higher and lower SCS mother/daughter dyads. Of particular interest were mother/daughter change event episodes, including conflict triggers, conflict patterns, and repair attempts, all of which often function as critical junctures in interaction.

Summary

This chapter has outlined the participants, methodology, and measurements used in the present study. Self-report and interaction data guided the analysis. Self-report data

provided relational adjustment scores in terms of mother and daughter satisfaction, closeness, and support. Interaction data provided relational control measures of domineeringness, dominance and transactional control patterns, as well as measures of support and nonsupport. Finally, qualitative interaction analysis allowed for a type of interpretive assessment of change event episodes, broadening the analytical scope of the relational communication approach. Together, these dimensions stand to make a valuable contribution to the present theoretical and empirical understanding of control, conflict, and support in mother/adolescent daughter relationships, as well as forging new ground by extending the qualitative parameters of relational control analysis.

CHAPTER 4

RESULTS

This study examines sequential interaction between mothers and adolescent daughters in terms of their relational patterns and significant change events that occur in their interaction. Relational communication as a theoretical and methodological approach guides this investigation, placing particular emphasis on process and form, as well as content and a basic description of individual messages. The main consideration in the present study is uncovering the process by which mothers and daughters relate with one another in their bids for connection, autonomy, support, control, affection, and so forth. To that end, the research questions sought to uncover relational patterns within the mother-adolescent daughter relationship. This chapter presents the results from the different types of analyses laid out in the previous chapter.

The presentation of results is organized according to the sample as a whole, mothers and daughters separately, and two groups of mother-daughter dyads segmented by self-reported scores on the Satisfaction-Closeness-Support (SCS) scale. As detailed previously, dyad scores were divided between two levels according to higher and lower SCS self-reports. Given the distribution of scores, references of "higher" and "lower" are used rather than "high" and "low". The higher SCS group consists of 18 dyads and the lower SCS group includes 22.

Analysis of relational communication data from coded interactions is used to describe process variables and relational patterns as identified in Research Question 1. Research Question 2 examines the same variables with consideration of outcome differences between higher and lower SCS groups. Qualitative means are used in answering RQ3 to identify and understand behaviors and patterns that function as change event episodes in all dyads or as distinguished between higher and lower SCS groups.

Research Question 1 Analysis

An original database was created consisting of transcribed and coded interactions from forty mother-adolescent daughter dyads. A search of the literature indicates this is the first study to apply the relational communication perspective to the mother-daughter relationship, making the results groundbreaking for this relationship, as well as offering comparative value with previous relational communication studies on marriage and triadic family interaction. The initial analysis answered the following research question:

RQ1: What overall patterns of relational control are exhibited in mother-adolescent daughter interactions?

Message Format Modes

Message code usage reveals detailed information about the types of messages that have been exchanged before having been converted to control direction and transact type. Table 1 provides a summary of message formats used by all mothers and daughters. Assertions accounted for the majority of messages, particularly considering that most of the alternate categories aside from questions also function as assertions. Whereas daughters made more assertions than mothers, mothers asked over three times as many

Table 1

Message Format Summary

Message Format (Digit 2)	Mother	Daughter	Total
Assertion	31%	36%	67%
Question	10%	3%	13%
Successful Talk-over	3%	4%	7%
Unsuccessful Talk-over	4%	5%	9%
Noncomplete	0%	1%	1%
Other	1%	1%	2%

questions as daughters. Talk-overs were relatively balanced with daughters slightly more successful in taking over the turn.

Message Response Modes

Table 2 further details the variety of responses. Extensions accounted for half of all responses, with mothers offering more extensions than daughters. Messages of support occurred more frequently than nonsupport messages, and daughters were more nonsupportive than mothers. Daughters also gave substantially more answers, which was not surprising in light of the greater number of questions asked by mothers. Instances of mothers or daughters giving orders or instructions were low overall, with the majority coming from mothers. Taken together, mothers' greater use of questions and low

Table 2

Message Response Mode Summary

Response Mode (Digit 3)	Mother	Daughter	Total
Support	11%	8%	19%
Nonsupport	6%	8%	14%
Extension	27%	22%	50%
Answer	1%	8%	9%
Instruction	1%	0%	1%
Order	1%	0%	1%
Disconfirmation	.08%	.09%	.17%
Topic Change	.5%	.5%	1%
Initiation/Termination	1%	1%	2%
Backchannel	1%	2%	3%

occurrence of orders/instructions may suggest a trend in which mothers are employing questioning strategies over giving commands. Mothers and daughters were equally likely to initiate topic changes and end conversations, whereas backchanneling, which includes neutral utterances such as "yeah," "um hmm," and "mmm," was twice as likely to come from daughters.

In accordance with the relational control coding system, message and response codes were translated into relational control codes denoted by one-up, one-down, and

one-across arrows. Relational control frequency data for the overall sample and for mothers and daughters is provided in Table 3. One-across messages accounted for the highest proportion of control directed messages, followed by one-up messages, then one-down messages. Whereas one-across messages were fairly balanced between mothers and daughters, a larger discrepancy existed between mothers and daughters in the expression of one-down and one-up messages. Mothers favored one-down messages more than daughters, a pattern that reversed with one-up messages, wherein daughters expressed more one-up messages than mothers.

Table 3

Frequencies and Percentages of Relational Control Messages

Interaction Components	Mother (n=20)	Daughter (n=20)	Dyads (n=40)
Coded Messages	8587	8535	17122
One-up Messages	2222 (13%)	3363 (20%)	5585 (33%)
One-down Messages	3087 (18%)	1720 (10%)	4807 (28%)
One-across Messages	3278 (18%)	3452 (20%)	6730 (39%)

Note. Percentages = message frequency ÷ total messages.

Additional Relational Communication Measures

In addition to frequency measures of support and nonsupport, which reflect mother and daughter proportions of the total dataset, support and nonsupport scores were calculated for mothers and daughters, as well as a support-nonsupport dyadic ratio, as shown in Table 4. As previously explained, supportive messages offer or seek "agreement, assistance, acceptance, encouragement, approval, etc." (Rogers, 1972b, p. 5). A support score represents the proportion of an individual's support messages offered in relation to their total number of messages and allows for comparison of whether mothers or daughters offer more messages of support (or nonsupport).

Table 4

Descriptive Control Measures

	Mother Score	Daughter Score	Dyad Ratio
Support	.20	.17	1.18
Nonsupport	.12	.16	.75
Support-Nonsupport Ratio			1.32
Domineeringness (↑)	.26	.39	.67
Submissiveness (↓)	.36	.20	1.8
Levelingness (→)	.38	.40	.95
Dominance (↑↓)	.16	.37	.43

Mothers' support score accounted for one-fifth of mothers' messages while daughters' support score was slightly lower. The mother-daughter support ratio is obtained by dividing mothers' support score by daughters' support score. A ratio close to one (1) signifies more equivalency in support between mothers and daughters. A ratio greater than one (1) indicates a higher occurrence of mother support than daughter support whereas a ratio less than one (1) indicates daughter support is more frequent than mother support. In this dataset, the mother-daughter support ratio signals slightly more support from mothers to daughters than vice versa.

Nonsupport messages, which reject, resist, disagree, demand, or challenge, are calculated in the same manner described above. Results show that mothers offered fewer nonsupport messages than support messages. Daughters were more balanced in their expressions of nonsupport and support, with daughters offering more nonsupportive messages than mothers (see Table 4). The dyadic nonsupport ratio was .75, verifying that daughters were indeed more openly nonsupportive to mothers than were mothers to daughters. The support to nonsupport ratio is obtained by dividing the combined mother and daughter support score by the combined mother and daughter nonsupport score. The support to nonsupport ratio confirmed that dyads overall conveyed more supportive messages than nonsupportive messages.

Other descriptive measures include domineeringness, submissiveness, levelingness, and dominance. Table 4 depicts results for each of these measures. As previously noted, the first three are primarily used as monadic scores indexing each relational partner's proportion of one-up (↑), one-down (↓), and one-across (→) control moves compared to their total number of messages. Dominance is a dyadic score representing the number of

one-up moves of one partner that are responded to with a one-down response by the other partner, also known as a one-up/one-down (↑↓) complementary transact. Dominance ratios are calculated in the same manner as described for support, with a ratio close to one (1) indicating more equivalency in how mothers and daughters negotiate definitional rights.

Overall, daughters were more domineering than mothers while mothers were nearly twice as submissive as daughters. This contributed to daughters also being more dominant than their mothers, while leveling scores were nearly equal. Differences between higher and lower SCS groups will be examined in Research Question 2.

Transacts

Following the relational communication perspective, evaluating transacts constitutes an essential step in examining process. Results in Table 5 reveal descriptive data for nine possible transact combinations. Transactional redundancy determines transact usage between nine possible relational control combinations. Redundancy scores range from 0 to 177 with higher scores indicating greater redundancy in transact usage. The average transactional redundancy score of 25 (given in Table 5) indicates a relatively high degree of overall interaction flexibility.

The nine transacts collapse into three overarching pattern types: complementary, symmetrical, and transitional. The two most frequently occurring patterns are both symmetrical, the most common being one-across and one-across messages (→→), or leveling symmetry, which accounted for one-fifth of transacts overall, and the next being competitive symmetry (↑↑). These were followed by one-down/one-up (↓↑) complementarity and the transitional one-across and one-down (→↓) pattern. Submissive

Table 5

Frequencies and Percentages of Transact Types

	Transact Type									
	Complementary		Symmetrical			Transitional				Total
	(↑↓)	(↓↑)	(↑↑)	(↓↓)	(→→)	(↑→)	(→↑)	(↓→)	(→↓)	
Frequency	1572	1779	2422	1410	3625	1504	1273	1597	1780	16,962
Percentage	9	11	14	8	21	9	8	9	11	100
Average Transactional Redundancy			25							

symmetrical transacts (↓↓), along with one-across and one-up transacts (→↑) were the lowest of all transact categories.

These transact configurations offer an initial look at how mother submissiveness and daughter domineeringness play out in relation to each other. How these transacts affect mothers' and daughters' feelings of satisfaction, closeness, and support, as represented by SCS scores, will be addressed in Research Question 2.

Relational Control Transacts

Beyond transact pairings, the dataset can be assessed according to relational structure found in the sequential organization of transacts. This allows for identifying patterns as well as relational characteristics of the dataset as a whole and by participant. Transact tables below illustrate the control direction of observed behaviors, first without and then with speaker designation. Table 6 portrays all variations of sequential interchange for all interactions without consideration of speaker order. Listed first in the

Table 6

Frequencies and Conditional Probabilities for Relational Control Transactions

	Response			
Initiation	OneUp	OneDown	OneAcross	Totals
OneUp	2422 (44%)*	1572 (29%)	1504 (27%)*	5498
OneDown	1779 (37%)*	1410 (29%)*	1597 (33%)*	4786
OneAcross	1273 (19%)*	1780 (27%)*	3625 (54%)*	6678
Totals	5474	4762	6726	16962

Note. Conditional probabilities in parentheses.
Percentages are rounded and sum to 100 across rows.
* Indicates significant adjusted residual score (see p. 84).

table are frequency counts for each transact. For example, an initiating one-up maneuver followed by a one-up response occurred 2422 times across the total interactions.

Also reported in Table 6 is the conditional probability for each type of transition. Based on sequentially ordered events, conditional probability conveys the likelihood of a particular response given a specific initiation. While expressed as a percentage, it does not refer to the percent of occurrence but rather to the likelihood of occurrence that is the probability of one event following another. For example, in Table 5, the 2422 one-up/one-up transacts occur in 14% of the total transacts, however in Table 6, the likelihood or conditional probability of a one-up initiation followed by a one-up response is .44.

Conditional probability provides useful information for depicting relational patterns. As shown above, the strongest conditional probability indicates that over half of instances initiated by a one-across would be followed by a one-across (54%). The transact with the next highest conditional probability is that of one-up followed by one-up (44%), suggesting that nearly half the time a given one-up will result in competitive symmetry. One-down initiations followed by one-up (37%) and one-across (33%) were also relatively high in likelihood of occurrence.

Speaker Ordered Patterns

Previous relational communication research has found speaker order to be a critical element in evaluating relational control patterns. Relational positions considered have included husband-wife, parent-child, therapist-client, and manager-subordinate. Consideration of speaker order is warranted particularly in relationships in which some degree of implicit or explicit relational control potentially resides in one member's role, such as is the case with mothers and daughters. Tables 7 and 8 detail conditional probabilities given the mother as initiator (followed by daughter response) and daughter as initiator (followed by mother response) respectively.

Each cell within the three contingency tables (Tables 6, 7 and 8) was tested for the existence of global association between initiation and response behaviors using Pearson's chi-square statistic (X^2) and the Likelihood-Ratio Chi-square (G^2), using the GSEQ data analysis program. Significant results were found for all, X^2 (4, N = 80) = 1259.48, $p < .01$ and G^2 (4, N =80) = 1287.14, $p < .01$ for Table 6, X^2 (4, N = 80) = 897.24, $p < .01$ and G^2 (4, N =80) = 916.92, $p < .01$ for Table 7, and X^2 (4, N = 80) = 521.09, $p < .01$ and G^2 (4, N =80) = 519.77, $p < .01$ for Table 8.

Table 7

Frequencies and Conditional Probabilities with Mother as Initiator

Initiation	Response: Daughter One-up	Response: Daughter One-down	Response: Daughter One-across
Mother One-up	1217 (56%)*	344 (16%)*	603 (28%)*
Mother One-down	1404 (46%)*	708 (23%)*	955 (31%)*
Mother One-across	689 (21%)*	660 (20%)	1889 (58%)*

Note. Conditional probabilities in parentheses.
Percentages are rounded and sum to 100 across rows.
* Indicates significant adjusted residual score (see p. 84).

Table 8

Frequencies and Conditional Probabilities with Daughter as Initiator

Initiation	Response: Mother One-up	Response: Mother One-down	Response: Mother One-across
Daughter One-up	1202 (36%)*	1227 (37%)	900 (27%)*
Daughter One-down	373 (22%)*	702 (41%)*	641 (37%)
Daughter One-across	582 (17%)*	1119 (33%)	1735 (50%)*

Note. Conditional probabilities in parentheses.
Percentages are rounded and sum to 100 across rows.
* Indicates significant adjusted residual score (see p. 84).

When significant relational structure is found to exist in a table overall, the adjusted residual index is used to assess whether the initiating behavior significantly influences the response behavior. Adjusted residuals are a normalized version of the difference between observed and expected transition frequencies. Values greater or equal to +1.96 indicate the response behavior is activated by the initiating behavior, and values below or equal to -1.96 indicate the response behavior is inhibited by the initiating behavior.

Analysis of the adjusted residual score for each transact in Tables 6, 7, and 8 found that a majority of cells evidenced relational structure. In transacts without speaker order designation (see Table 6) every transact but one (↑↓) showed relational structure. For mother-initiated transacts all but one pattern (M→D↓) was significant, and for daughter-initiated transacts all but two patterns (D↑M↓ and D→M↓) were significant (see Tables 7 and 8). One-across/one-across leveling symmetry (→→) was the dominant pattern for mothers and daughters as initiator. The next most prevalent pattern for mother as initiator was one-up/one-up competitive symmetry(↑↑) which occurred almost as frequently with daughter as antecedent. Considering the high number of one-up maneuvers overall this was expected. Given daughter as antecedent, the one-down/one-down submissive symmetry (↓↓) transition had high probability which stands in notable contrast to mother-initiated one-downs that were most often responded to with daughter one-ups.

The pattern thus far shows a strong likelihood for mothers' one-up and one-down messages to be responded to with a one-up from daughters, while one-across messages from either are likely to be reciprocated by another one-across response. The least probable response was a daughter one-across followed by a mother one-up or a mother

one-up followed by daughter one-down. The high overall occurrence of daughter one-ups and mother one-downs would certainly contribute to these patterns.

While the adjusted residual index evidences relational structure within specific cells of the table, it is limited in its inability to detect which patterns within the table are interrelated. “Winnowing” is a procedure that considers the redundancies within a contingency table and identifies specific patterns that act independent of each other. The winnowing process is applied to significant adjusted residuals using the ILOG computer program (Escudero & Rogers, 2004; Quera & Bakeman, 1999) and entails replacing statistically significant adjusted residual cells with a structural zero one at a time. Each step of the winnowing process is reanalyzed for significance using the chi-square statistic and is repeated until the chi-square loses significance. Winnowing can begin by replacing the cell with the greatest adjusted residual score or any cell of particular interest. In this case, cells were removed in a varying order with no differentiating effect on the result.

Tables 9, 10, and 11 highlight several transact cells that retained significance through the winnowing process (as indicated by **). For combined interactions (Table 9), every cell with the exception of one-up, one-down (↑↓) was found to contribute to the overall significance of the table, meaning that eight of the nine patterns operate interdependently in giving the transition table relational structure. In the case of mother as initiator (Table 10), again, eight of the nine patterns retained significance with the exception of mother one-across, daughter one-down (M→D↓). Fewer patterns proved to be acting independently in transitions with daughter as initiator (Table 11), namely, daughter one-up, mother one-up (D↑M↑), daughter one-up, mother one-across (D↑M→), and daughter one-across, mother one-across (D→M→).

Table 9

Adjusted Residual Scores for Relational Control Transactions

	Response		
Initiation	OneUp	OneDown	OneAcross
OneUp	22.73**	1.04	-22.67**
OneDown	8.56**	2.52**	-10.49**
OneAcross	-29.65**	-3.32**	31.39**

Note. * Indicates significant adjusted residual score
** Indicates significant adjusted residual score and significant after winnowing (see pp. 84 and 85).

Table 10

Adjusted Residual Scores for Mother as Initiator

	Response		
Initiation	Daughter One-up	Daughter One-down	Daughter One-across
Mother One-up	18.95**	-5.80**	-14.09**
Mother One-down	9.51**	4.95**	-13.50**
Mother One-across	-26.42**	0.30	25.99**

Note. * Indicates significant adjusted residual score.
** Indicates significant adjusted residual score and significant after winnowing (see pp. 84 and 85).

Table 11

Adjusted Residual Scores for Daughter as Initiator

	Response		
Initiation	Mother One-up	Mother One-down	Mother One-across
Daughter One-up	18.14**	1.42	-17.63**
Daughter One-down	-3.94*	4.80*	-1.21
Daughter One-across	-14.83*	-5.34*	18.52**

Note. * Indicates significant adjusted residual score.
** Indicates significant adjusted residual score and significant after winnowing (see pp. 84 and 85).

Winnowing allows for a more focused evaluation of the major patterns of interaction and serves to direct further analysis of the dataset based on those patterns of significance. More will be said about this in a later section. Consideration of higher and lower SCS group frequencies and conditional probabilities will be statistically analyzed in Research Question 2.

Complex Patterns

To expand relational communication pattern descriptions it is necessary to move beyond the analysis of transact patterns to more complex patterns consisting of more than two message sequences. Such sequences have been found to depict forms of interaction that denote relational meaning (Escudero & Rogers, 2004). Such configurations are termed episodes. Two episodes that have gained recognition in the relational

communication literature are the conflict episode (↑↑↑) (Bavelas, Rogers, & Millar, 1985; Millar, Rogers, & Bavelas, 1984) and the leveling negotiation episode (→↓→↓) (Beyebach & Escudero, 1997; Beyebach, Rodriguez-Morejon, Palenzuela, & Rodriguez-Arias, 1996). Table 12 displays the occurrence of these sequences along with an additional configuration of a leveling episode (↓→↓→), submissive symmetry (↓↓↓) and leveling symmetry (→→→) episodes, as well as a sequence configuration consisting of

Table 12

Complex Relational Patterns

Complex Patterns	Total (Mother and Daughter Initiated)
Leveling Symmetry (→→→)	2244
Conflict Episodes (↑↑↑)	1538
Submissive Symmetry (↓↓↓)	683
Leveling Negotiation Episodes (→↓→↓)	319
One-Down Leveling Episodes (↓→↓→)	316
One-up Complementarity (↑↓↑↓)	404
One-down Complementarity (↓↑↓↑)	496
Extended Conflict Episodes (↑↑↑↑↑↑)	649

six consecutive one-up moves referred to in the present study as an extended conflict episode (↑↑↑↑↑↑).

Leveling symmetry. The highest occurrence of all complex pattern configurations was that of leveling symmetry (→→→), which occurred 2244 times. This was followed by conflict episodes (↑↑↑), of which there were 1538 instances, submissive symmetry sequences (↓↓↓) with 683 occurrences, and extended conflict episodes (↑↑↑↑↑↑) which occurred 649 times throughout the dataset. One-across leveling episodes (→↓→↓) and one-down leveling episodes (↓→↓→) appeared a nearly equal number of times, 319 and 316 instances respectively. Certain of these episodes will be elaborated on below.

Conflict episodes. The conflict episode is conceived as "active opposition" (Escudero & Rogers, 2004, p. 72) and consists of three or more consecutive one-up (↑↑↑) messages between interactors. In this sequence, one person's assertion is responded to with opposition, which is in turn responded to with rejection. For example:

(↑) M: But you, you hide a lot from me.
(↑) D: I wouldn't say that.
(↑) M: You do, you hide quite a bit.
(Dyad #7, Topic 4)

Conflict episodes are not unusual in parent-child interactions and are not always indicative of troubled relationships, although their occurrence in relation to self-reported SCS levels is important and will be addressed with Research Question 2.

Extended conflict episodes. In an exploratory effort, conflict episodes consisting of a minimum of six consecutive one-up messages (↑↑↑↑↑↑) were analyzed. Conflict episodes in this category are by definition included in counts of traditional conflict episodes of three or more one-up maneuvers. What this measure affords is a means to

identify prolonged conflict sequences that highlight more intense cases of escalating symmetry within the dataset. The following is an example of a longer competitive sequence:

(↑) M: You did get mad! And do you remember what you got mad about?
(↑) D: Yeah! *defensively*
(↑) M: What? *challenging*
(↑) D: You weren't paying attention and I was like "Mom!" and you were ignoring me.
(↑) M: I wasn't ignoring you. *rejecting*
(↑) D: (Yeah!) *irritated*
(Dyad #26, Topic 3)

As evident in Table 12, close to half of all conflict episodes perpetuated to the point of six or more one-up exchanges. The extent to which mothers and daughters allow competitive symmetry to escalate is likely to have meaningful implications for each partner's assessment of relational support, closeness, and satisfaction, as examined in the next section.

Submissive symmetry. Episodes of three or more one-down moves (↓↓↓) are those in which partners offer mutual support of each other or willingly agree with or give in to each other. This excerpt is typical of a submissive episode:

(↓) M: …I love it when we just talk.
(↓) D: Mmmm Hmmmm.
(↓) M: We just have heart to heart talks, and I love going to Frogurt with you.
(↓) D: That's the best.
(Dyad #31, Topic 1)

Submissive symmetry occurred less than half as often as conflict episodes and to about the same extent as extended conflict episodes. As previously noted, Mother one-downs were far more common than Daughter one-downs, making submissive sequences less likely. It appears that for many pairs, contentious behaviors are more normative than supporting or giving in to the other.

Complementarity episodes. One-up and one-down complementarity episodes were nearly balanced in occurrence. One-up complementarity (↑↓↑↓) follows a pattern wherein one partner makes an assertion that is followed by agreement or apology by the other, then another assertive message by the first person responded to with another agreement or apology. The following is an example:

(↑) D: You're just making it awkward.
(↓) M: Okay, I'm sorry.
(↑) D: Don't make it awkward.
(↓) M: Okay.
(Dyad #32, Topic 1)

One-down complementarity (↓↑↓↑) reverses the pattern, beginning with a statement that seeks or offers support or agreement, followed by an assertive message, then another statement of support or agreement followed by an assertion. This is portrayed in the following excerpt:

(↓) M: …yeah, I second guess myself too much.
(↑) D: Yeah, you do it on a test too and then you get in trouble.
(↓) M: I know, cause I do bad on tests.
(↑) D: That's what I'm saying. Don't second guess yourself. Just do it, okay? If you know you need to do it, just do it and that's it.
(Dyad #38, Topic 3)

Leveling negotiation episodes. Leveling episodes consisting of across-down-across-down (→↓→↓) transitions occurred 319 times in the dataset, substantially less than almost all other episode configurations.

The following interchange illustrates a one-across leveling episode:

(→) D: It's never like we actually fight though,
(↓) M: (no, we don't)
(→) D: like, we never have disagreements.
(↓) M: That are anything major.
(Dyad #8, Topic 3)

One-across leveling episodes have been highlighted in the relational communication literature for their neutralizing effect in regulating conflict (Beyebach & Escudero, 1997; Beyebach, et al., 1996). The comparatively low number present in this dataset is likely related to Daughters' less frequent one-down messages and may have implications for the successful regulation of conflict among mothers and daughters in this study.

One-down leveling episodes (↓→↓→) occurred close to the same number of times as one-across leveling episodes, and are similar except that the initiating maneuver is submissive or supportive and influences a neutral or leveling extension from the other. An example of one-down leveling occurred in the following interchange:

(↓) M: I like watching stupid chick flicks with you.
(→) D: I like chick flicks. I want to watch *Mamma Mia*.
(↓) M: Okay, we can watch *Mamma Mia*, but I like it when you make me watch the really stupid chick flicks.
(→) D: Like what?
(Dyad #33, Topic 1)

Summary of Research Question 1 Results

To sum up the descriptive information characterized in this dataset, mothers were more supportive toward daughters, and daughters were more nonsupportive toward mothers; although overall, mother and daughter pairs offered more supportive behaviors than nonsupportive behaviors. Mothers asked far more questions than daughters, and giving orders or instructions occurred infrequently for both. One-across (→) messages were the most dominant message followed by one-up (↑) messages, and lastly, one-down (↓) messages. Mothers were more submissive than daughters, and daughters were more domineering and dominant than mothers.

The leveling transact (→→) was the most commonly occurring exchange and showed the strongest conditional probability, followed by the competitive transact (↑↑), then one-down complementary (↓↑) and one-across leveling (→↓) and one-down leveling (↓→). Considering mother and daughter as initiator, the leveling transact (→→) was still the most likely exchange. Along with that, mother one-up, daughter one-up (M↑D↑) was a prevalent pattern, followed by daughter one-up, mother one-up (D↑M↑).

Daughter one-down, mother one-down (D↓M↓) was also notable and stood in contrast with another common but opposite exchange of mother one-down, daughter one-up (M↓D↑). Overall, mother one-up and mother one-down behaviors are most often responded to with daughter one-up behaviors, and mother or daughter leveling (→) begets mother or daughter leveling (→)in return. In terms of complex patterns, leveling symmetry (→→→) is the predominant pattern, with competitive symmetry (↑↑↑) being the next most common. Submissive symmetry (↓↓↓) and extended competitive symmetry (↑↑↑↑↑↑) sequences had a notable presence in the interactions and complementary episodes (↑↓↑↓ and ↓↑↓↑) and leveling episodes (→↓→↓ and ↓→↓→) occurred moderately often. Further analysis of the above descriptive information is offered in the next section.

Research Question 2 Analysis

To answer Research Question 2, statistical procedures were employed to test for group differences and significance in patterned behavior. Lag sequential analysis provided more in-depth analysis of relational control patterns. The following research question guided this analysis:

RQ2: What are the differences in relational control patterns between higher and lower SCS mother-adolescent daughter dyads?

Descriptive information and parametric tests were used to evaluate the relationship between many of the process variables outlined in Research Question 1 and higher and lower SCS groups.

Message Format Modes

Table 13 compares message formats (digit 2 in the Relational Communication Control Coding System) used by higher and lower SCS groups. In both groups, assertions made up the majority of messages with higher SCS dyads expressing slightly more assertions than lower SCS dyads, although all categories were nearly or equally balanced between groups. The most notable difference emerged in lower SCS pairs asking more questions than higher SCS pairs (15% and 10% respectively), although the difference was not significant, $t(38) = 1.617$, $p = .114$.

Further analysis indicates the use of certain types of questions does contribute to mothers' and daughters' feelings of relational satisfaction, closeness, and support. Questions are not uniform in meaning and can be posed in a variety of ways so as to be interpreted as supportive, nonsupportive, or neutral in their intent. A look at mothers' questions paired with message response modes (digits 2 and 3 combined) yields further insight into question use as a conversational strategy. Questions that seek information are considered neutral in effect (question-extension), whereas questions seeking validation or support in a nonadversarial way are supportive (question-support), and questions that challenge, demand, or disagree are constraining (question-nonsupport) (Escudero &

Table 13
Frequencies and Percentages of Message Format Responses by SCS Group and Overall

Message Format (Digit 2)	Higher SCS (Σ = 8059)	Lower SCS (Σ = 9063)	Total (Σ = 17122)
Assertion	5546 (69%)	5924 (65%)	11470 (67%)
Question	844 (10%)	1359 (15%)	2203 (13%)
Successful Talk-over	601 (7%)	652 (7%)	1253 (7%)
Unsuccessful Talk-over	788 (10%)	806 (10%)	1594 (9%)
Noncomplete	74 (1%)	114 (1%)	188 (1%)
Other	206 (3%)	211 (2%)	417 (2%)

Note. Percentages = frequency ÷ total messages overall or total messages for each group. Percentages are rounded.

Rogers, 2004a). Table 14 details the breakdown of supportive, nonsupportive, and neutral questions as expressed in higher and lower SCS dyads and by mothers and daughters.

In both groups, neutralizing questions (question-extension) were the most common. A 2 x 2 MANOVA[1] tested the effect of satisfaction (higher or lower SCS group) and relationship (mother or daughter) on three dependent variables (question-support, question-nonsupport, and question-extension). The overall MANOVA was significant for the relationship main effect, Wilks $\Lambda = .407$, $F(3, 74) = 36.006$, $p = .000$, and the relationship-satisfaction interaction, Wilks $\Lambda = .895$, $F(3, 74) = 2.899$, $p = .041$, but not the satisfaction main effect, Wilks $\Lambda = .919$, $F(3, 74) = 2.176$, $p = .098$. The univariate

Table 14

Frequencies and Percentages of Question-Support, Question-Nonsupport, and Question-Extension in Higher and Lower SCS Groups, Overall, and by Mother/Daughter

Question Type (Digit 2 and 3)	Higher SCS (**Σ** = 8059)	Lower SCS (**Σ** = 9063)	Total (**Σ** = 17122)
Question-Support	54 (.67%)	96 (1.1%)	150 (.88%)
	M 42 (.52%)	M 89 (.98%)	131 (.77%)
	D 12 (.15%)	D 7 (.08%)	19 (.11%)
Question-Nonsupport	71 (.9%)	218 (2.4%)	289 (1.7%)
	M 43 (.5%)	M 153 (1.7%)	196 (1.14%)
	D 28 (.4%)	D 65 (.7%)	93 (.54%)
Question-Extension	630 (8%)	939 (10%)	1569 (9.2%)
	M 478 (6%)	M 812 (9%)	1290 (7.5%)
	D 152 (2%)	D 127 (1%)	139 (.81%)
Total	755 (9.57%)	1253 (13.5%)	2008 (11.7%)
	M 563 (7.02%)	M 1054 (11.68%)	1107 (6.5%)
	D 192 (2.55%)	D 199 (1.78%)	391 (2.3%)

Note. Percentages = frequency ÷ total messages overall or total messages for each group. Percentages are rounded.

test for relationship revealed significant effects for question-support, F (1, 76) = 9.350, p = .003, and question-extension, F (1, 76) = 110.510, p = .000, but not for question-nonsupport, F (1,76) = 1.712, p = 195. Scheffe post hoc multiple comparisons revealed that mothers asked significantly (p =.003) more questions seeking support ($\bar{x}$ = .016), than did their daughters ($\bar{x}$ = .002). A similar pattern was found regarding question-extension with mothers asking significantly more (p=.000) question-extensions ($\bar{x}$ = .152) than daughters ($\bar{x}$ = .030).

A mean score for each participant was devised by dividing the total number of each question type by the total number of messages, then devising the mean for all participants' scores. Mean scores were devised as such for all of the following MANOVA tests. Differences in means between mothers and daughters and significance scores for question-support, question-nonsupport, and question-extension are presented in Table 15.

Table 15

Differences between Question-Support, Question-Nonsupport, and Question-Extension Means by Mother and Daughter

Question Type (Digit 2 and 3)	Mothers' Mean Score	Daughters' Mean Score	Between-group Differences *F*
Question-Support	.016	.002	9.350**
Question-Nonsupport	.021	.011	1.042
Question-Extension	.152	.030	8.114***

* p < .05; ** p < .01; *** p < .001 (d.f. = 38).

The test for the satisfaction by relation interaction revealed significant results in the use of question-extensions, F (1,76) = 8.114, p = .006, but not other question types. The means for the satisfaction-relationship interaction are displayed in Table 16. Lower SCS mothers used the greatest number of question-extensions ($\bar{x}$ = .180) overall, although higher SCS daughters asked more question-extensions ($\bar{x}$ = .036) than lower daughters ($\bar{x}$ = .025).

Message Response Modes

A 2 x 2 MANOVA examined satisfaction and relationship differences between the support, nonsupport, and extension response modes (digit 3)[2], and higher and lower SCS groups, and mothers and daughters. The overall MANOVA was significant for the satisfaction main effect, Wilks Λ = .821, F (3, 74) = 5.386, p = .002, and the relationship main effect, Wilks Λ = .646, F (3, 74) = 13.489, p = .000. The satisfaction-relationship main effect was not significant, Wilks Λ = .911, F (3, 74) = 2.420, p = .073.

Table 16

Interaction Effect between Satisfaction and Relationship for Question-Extension

Question-Extensions	Higher SCS Group Means	Lower SCS Group Means	Between-group differences F
Mother	.125	.180	8.114**
Daughter	.036	.025	

* p < .05; ** p < .01; (d.f. = 38).

The univariate test for satisfaction revealed significant effects for nonsupport, F (1, 76) = 12.659, p = .001, and extension messages, F (1, 76) = 4.418, p = .039. Scheffe post hoc multiple comparisons revealed that expressions of nonsupport were twice as frequent in lower SCS dyads ($\bar{x}$ = .096) than in higher SCS dyads ($\bar{x}$ = .047) (see Table 17). Alternately, post hoc comparisons indicated that higher SCS pairs offered significantly more neutral extensions ($\bar{x}$ = .265) than lower SCS pairs ($\bar{x}$ = .223) (see Table 18).

Table 17

Frequencies and Percentages of Support, Nonsupport, and Extension Response Modes by Satisfaction and Relationship

Response Mode (Digit 3)	Higher SCS Messages (**Σ** = 8059)	Lower SCS Messages (**Σ** = 9063)	Total Messages (**Σ** = 17122)
Support	1658 (21%)	1408 (16%)	3066 (18%)
	M 908 (22%)	M 755 (17%)	1663 (19%)
	D 750 (19%)	D 653 (14%)	1403 (16%)
Nonsupport	734 (9%)	1710 (19%)	2444 (14%)
	M 329 (8%)	M 743 (16%)	1072 (12%)
	D 405 (10%)	D 967 (21%)	1372 (16%)
Extension	4327 (53%)	4209 (46%)	8536 (50%)
	M 2223 (55%)	M 2480 (55%)	4703 (55%)
	D 2104 (52%)	D 1729 (38%)	3833 (45%)

Note. Higher and Lower SCS percentages = frequency ÷ total messages by SCS group.
Higher and Lower SCS percentages by Mother and Daughter = frequency ÷ total Mother or Daughter messages by SCS group.
Total percentage = frequency ÷ total messages overall.

Table 18

Differences between Support, Nonsupport, and Extension Response Modes by Satisfaction

Response Mode (Digit 3)	Higher SCS	Lower SCS	*F*
Support	.103	.082	3.025
Nonsupport	.047	.096	12.659***
Extension	.265	.223	4.418*

* p < .05; ** p < .01; *** p < .001 (d.f. = 38).

The univariate test for relationship revealed a significant difference between mothers' and daughters' use of extensions, F (1, 76) = 7.692, p = .007, but not with messages of support, F (1,76) = 1.512, p = .223, or nonsupport, F (1,76) = 2.098, p = .152 (see Table 19). Scheffe post hoc multiple comparisons revealed that mothers offered more neutral extensions ($\bar{x}$ = .271) than daughters ($\bar{x}$ = .216).

Descriptive Relational Communication Variables in Higher and Lower SCS Groups

The relationship between dependent variables one-up (↑), one-down (↓), and one-across (→) messages, and independent variables satisfaction (higher or lower SCS group) and relationship (mother or daughter) were assessed using a 2 x 2 MANOVA. Descriptive information is outlined in Table 20, followed by differences between satisfaction groups in Table 21, and relationship in Table 22.

Table 19

Differences between Support, Nonsupport, and Extension Response Modes by Relationship

Response Mode (Digit 3)	Mother	Daughter	*F*
Support	.100	.085	1.512
Nonsupport	.061	.081	2.098
Extension	.271	.216	7.692**

* $p < .05$; ** $p < .01$; (d.f. = 38).

Table 20

Frequencies and Percentages of Total Messages and Domineering, Submissive, and Leveling Messages by Satisfaction and Relationship

Interaction Components		Higher SCS dyads (n=18)	Lower SCS dyads (n=22)	Total (n=40 dyads)
Coded Messages		8059 (47%)	9063 (53%)	17122
	M	4040 (50%)	4547 (50%)	8587 (50%)
	D	4019 (50%)	4516 (50%)	8535 (50%)
One-up Messages (↑)		2127 (26%)	3458 (38%)	5585 (33%)
	M	916 (11%)	1306 (14%)	2222 (13%)
	D	1211 (15%)	2152 (24%)	3363 (20%)
One-down Messages (↓)		2365 (30%)	2442 (27%)	4807 (28%)
	M	1435 (18%)	1652 (18%)	3087 (18%)
	D	930 (12%)	790 (9%)	1720 (10%)
One-across Messages (→)		3567 (44%)	3163 (35%)	6730 (39%)
	M	1689 (21%)	1589 (18%)	3278 (19%)
	D	1878 (23%)	1574 (17%)	3452 (20%)

Note. Higher and Lower SCS percentages = frequency ÷ total messages by SCS group.
Higher and Lower SCS percentages by Mother and Daughter = frequency ÷ total Mother or Daughter messages by SCS group.
Total percentage = frequency ÷ total messages overall.

Table 21

Differences between Domineering, Submissive, and Leveling Messages by Satisfaction

Interaction Components	Higher SCS (n=18)	Lower SCS (n=22)	*F*
One-up Messages (↑)	.133	.193	14.567***
One-down Messages (↓)	.149	.139	.527
One-across Messages (→)	.218	.169	6.639*

Note. * $p < .05$; ** $p < .01$; *** $p < .001$ (d.f. = 38).

Table 22

Differences between Domineering, Submissive, and Leveling Messages by Relationship

Interaction Components	Mother (n=20)	Daughter (n=20)	*F*
One-up Messages (↑)	.128	.198	19.442***
One-down Messages (↓)	.185	.103	39.740***
One-across Messages (→)	.189	.198	.205

Note. * $p < .05$; ** $p < .01$; *** $p < .001$ (d.f. = 38).

The overall MANOVA was significant for the satisfaction main effect, Wilks Λ = .806, F (3, 74) = 5.941, p = .001, and the relationship main effect, Wilks Λ = .567, F (3, 74) = 18.808, p = .000. The univariate test for satisfaction revealed significant effects for domineering (↑) messages, F (1, 76) = 14.567, p = .000, and neutralizing (→) messages, F (1, 76) = 6.639, p = .012, but not for submissive (↓) messages, F (1, 76) = .527, p = .470. Scheffe post hoc multiple comparisons indicate that lower SCS dyads expressed significantly (p = .000) more one-up messages ($\bar{x}$ = .193) than higher SCS pairs ($\bar{x}$ = .133), while higher SCS dyads used significantly (p = .012) more one-across maneuvers ($\bar{x}$ = .218) than lower SCS dyads ($\bar{x}$ = .169). One-down messages appeared more balanced between groups and were not significant. The univariate test for the number of coded messages by satisfaction was not significant F(1, 76) = .016, p = .900.

The univariate test for relationship revealed significant effects for domineering (↑) messages, F (1, 76) = 19.442, p = .000, and submissive (↓) messages, F(1, 76) = 39.740, p = .000, but not for neutralizing (→) messages, F (1, 76) = .205, p = .652. Scheffe post hoc multiple comparisons revealed that daughters were significantly (.000) more domineering (↑) ($\bar{x}$ = .198) than mothers ($\bar{x}$ = .128), while mothers were significantly more submissive (↓)($\bar{x}$ = .185) than daughters ($\bar{x}$ = .103). In sum, across dyads, lower SCS pairs were more domineering, while higher SCS pairs were more leveling, while within dyads, mothers were more submissive and daughters were more domineering.

Analysis of Additional Relational Communication Scores and Ratios

Examining higher and lower SCS groups regarding categories of scores and ratios previously described including support, nonsupport, question usage, domineeringness, submissiveness, levelingness, and dominance, provided detailed insight into group

differences. As shown in Table 23, higher SCS mothers and daughters offered more support messages than mothers and daughters in the lower group, although the dyadic ratio was nearly equivalent between groups and indicates mothers in both groups offer and seek more support than daughters.

In terms of nonsupportive messages, lower SCS dyads were twice as likely as higher SCS dyads to convey nonsupport. In both groups, daughters expressed more negativity, disagreement, and/or challenging statements than mothers. The support-nonsupport dyadic ratio points to dramatic differences between higher and lower groups, with higher SCS dyads experiencing over twice as much support as nonsupport, and lower SCS dyads expressing more nonsupport than support, although t-tests were not significant.

Table 23

Scores and Ratios for Support and Nonsupport Messages Overall and by Satisfaction and Relationship

(Digit 3)	Higher SCS	Lower SCS	Total
Support			
Mother Score	.23	.18	.20
Daughter Score	.19	.15	.17
Dyad Ratio	1.21	1.2	1.18
Nonsupport			
Mother Score	.08	.16	.12
Daughter Score	.10	.21	.16
Dyad Ratio	.80	.76	.75
Dyadic Support-Nonsupport Ratio	2.33	.89	1.32

Transacts

Transact combinations that form complementary, symmetrical, and transitional pattern types were presented earlier for the overall sample. Table 24 depicts transact occurrences by frequency and percent for higher and lower SCS groups. Leveling symmetry (→→) was the most frequently occurring transact and accounted for one-fourth of higher SCS transacts and just under one-fifth of lower SCS transacts. The competitive symmetrical pattern (↑↑) was the second most prevalent pattern overall and emerged as a notable differentiator between higher and lower SCS groups, with lower SCS dyads demonstrating nearly twice the competitive symmetry as higher SCS dyads. Transactional redundancy scores were equivalent between higher and lower SCS groups, measuring 28 within a range of 0 to 177. Both groups exhibited a fairly high degree of flexibility in their message exchange except for a few noted patterns frequently repeated.

Table 24

Frequencies and Percentages of Transacts Overall and by Higher and Lower SCS Group

	Transact Type									
	Complementary		Symmetrical			Transitional				Total
	(↑↓)	(↓↑)	(↑↑)	(↓↓)	(→→)	(↑→)	(→↑)	(↓→)	(→↓)	
Higher SCS	621 8%	698 9%	789 10%	816 10%	2043 26%	680 9%	586 7%	843 11%	911 11%	7987
Lower SCS	951 11%	1081 12%	1633 18%	594 7%	1582 18%	824 9%	687 8%	754 8%	869 10%	8975
Total	1572 9%	1779 11%	2422 14%	1410 8%	3625 21%	1504 9%	1273 8%	1597 9%	1780 10%	16962

A 2 x 2 MANOVA was conducted on transacts without speaker order designation, and higher and lower satisfaction (see Table 25). The overall MANOVA was not significant for the satisfaction main effect, Wilks Λ = .686, F (8, 31) = 1.778, p = .120. The univariate test for relationship did reveal significant effects for the one-up/one-up (↑↑) competitive transact, F (1, 38) = 6.153, p = .018, the one-up/one-down (↑↓) transact, F (1, 38) = 4.674, p = .037, and the one-down/one-up (↓↑) transact, F (1, 38) = 5.166, p = .029. Scheffe post hoc multiple comparisons revealed that in all three cases, lower SCS dyads enacted the above transact patterns more often. Specifically, lower SCS pairs exhibited significantly (p = .018) more one-up/one-up transacts ($\bar{x}$ = .187) than higher pairs ($\bar{x}$ = .098), significantly (p = .037) more one-up/one-down transacts ($\bar{x}$ = .109) than higher pairs ($\bar{x}$ = .079), and significantly (p = .029) more one-down/one-up transacts ($\bar{x}$ = .123) than higher SCS pairs ($\bar{x}$ = .091).

Table 25

Means and F scores of Significant Transacts by Satisfaction

Transact Type	Higher SCS Transact Means	Lower SCS Transacts Means	*F*
One-up/One-up (↑↑)	.098	.187	6.153*
One-up/One-down (↑↓)	.079	.109	4.674*
One-down/One-up (↓↑)	.091	.123	5.166*

Note. * p < .05; (d.f. = 38).

Speaker Order

To assess speaker order differences, 2 x 2 MANOVAs tested the above nine transacts with mother and daughter as initiator, and satisfaction. The overall MANOVA for transacts with mother as antecedent was significant for the satisfaction main effect, Wilks Λ = .507, F (9, 30) = 3.238, p = .007. The univariate test for satisfaction revealed significant effects for mother one-up/daughter one-up (M↑D↑), F (1, 38) = 6.248, p = .017, and mother one-down/daughter one-up (M↓D↑), F(1, 38) = 7.761, p = .008. Scheffe post hoc multiple comparisons revealed that lower SCS pairs enacted significantly (.017) more mother-initiated competitive transacts (M↑D↑) ($\bar{x}$ = .094) than higher SCS pairs ($\bar{x}$ = .049). Lower SCS dyads also enacted significantly (.008) more mother one-down/daughter one-up (M↓D↑) transacts, $\bar{x}$ = .104, than higher dyads, $\bar{x}$ = .067.

The overall MANOVA for transacts with daughter as antecedent was significant for the satisfaction main effect, Wilks Λ = .574, F(9, 30) = 2.476, p = .030. The univariate test for satisfaction revealed significant effects for daughter one-up/mother one-up (D↑M↑) transacts, F (1, 38) = 5.944, p = .020, daughter one-up/mother one-down (D↑M↓) transacts, F (1, 38) = 7.325, p = .010, and daughter one-across/mother one-down (D→M↓) transacts, F (1, 38) = 5.270, p = .027. Scheffe post hoc multiple comparisons revealed that daughter-initiated competitive symmetry (D↑M↑) occurred significantly (p = .020) more in lower SCS pairs ($\bar{x}$ = .092) than in higher SCS pairs ($\bar{x}$ =.049). Daughter one-up/mother one-down (D↑M↓) complementarity was also significant (p = .010) and occurred more often in lower SCS pairs ($\bar{x}$ = .091) than in higher SCS pairs

($\bar{x}$ = .057). Daughter one-across/mother one-down (D→M↓) transacts, occurred more often among higher SCS dyads ($\bar{x}$ = .073) than lower SCS dyads ($\bar{x}$ = .059).

The following tables outline descriptive information for the eighteen transact pattern types by mother-initiated transacts (Table 26) and daughter-initiated transacts (Table 27). Table 28 presents significant differences between the five statistically significant speaker-ordered transacts. Taken together, mother- and daughter-initiated competitive symmetry occurred more frequently in lower SCS pairs, as did mother-initiated one-down complementarity and daughter-initiated one-up complementarity. Only one transact type, daughter one-across/mother one-down transitory exchanges, occurred more often in higher SCS dyads than in lower SCS dyads.

Complex Relational Patterns

Notable differences emerged in descriptive information about complex patterns, or episodes, between higher and lower SCS dyads. Tables 29-36 present the total occurrences of complex episodes overall and with mother and daughter as initiator, as well as the proportion of pattern occurrence between higher and lower SCS groups, and *t*-test scores for each pattern[3].

As evident in Table 29, one-across leveling symmetry episodes (→→→) and one-down leveling symmetry episodes (↓↓↓) occurred in nearly equal measure overall and between higher and lower SCS groups, and were not significant, $t(38) = 1.649$, $p = .107$ for across-down-across-down (→↓→↓) episodes, and $t(38) = 1.403$, $p = .169$ for down-across-down-across (↓→↓→) episodes. Table 30 shows that the same leveling episodes with mother and daughter as initiator resulted in only one significant ($p = .036$) configuration, that of daughter-initiated one-across leveling (D→M↓D→M↓). This

Table 26

Frequency and Percentage of Mother-Initiated Transacts by Satisfaction

Transact Type	Higher SCS Transacts (total = 7987)	Lower SCS Transacts (total = 8975)	Total Transacts 16,962
Mother one-up/Daughter one-up (M↑D↑)	398 5%	819 9%	1217 7%
Mother one-up/Daughter one-down (M↑D↓)	179 2%	165 2%	344 2%
Mother one-up/Daughter one-across (M↑D→)	313 4%	290 3%	603 4%
Mother One-Down/Daughter One-up (M↓D↑)	501 6%	903 10%	1404 8%
Mother one-down/Daughter one-down (M↓D↓)	409 5%	299 3%	708 4%
Mother one-down/Daughter one-across (M↓D→)	518 6%	437 5%	955 6%
Mother one-across/Daughter one-up (M→D↑)	289 4%	400 4%	689 4%
Mother one-across/Daughter one-down (M→D↓)	336 4%	324 4%	660 4%
Mother one-across/Daughter one-across (M→D→)	1046 13%	843 9%	1889 11%

Table 27

Frequency and Percentage of Daughter-Initiated Transacts by Satisfaction

Transact Type	Higher SCS Transacts (total = 7987)	Lower SCS Transacts (total = 8975)	Total Transacts 16,962
Daughter One-up/Mother One-up (D↑M↑)	391 5%	811 9%	1202 7%
Daughter One-up/Mother One-down (D↑M↓)	441 6%	786 9%	1227 7%
Daughter One-up/Mother one-across (D↑M→)	367 5%	533 6%	900 5%
Daughter One-down/Mother one-up (D↓M↑)	197 2%	176 2%	373 2%
Daughter One-down/Mother one-down (D↓M↓)	407 5%	295 3%	702 4%
Daughter One-down/Mother one-across (D↓M→)	324 4%	317 4%	641 4%
Daughter One-across/Mother one-up (D→M↑)	296 4%	286 3%	582 3%
Daughter One-across/Mother One-down (D→M↓)	575 7%	544 6%	1119 7%
Daughter One-across/Mother one-across (D→M→)	997 12%	738 8%	1735 10%

Table 28

Differences between Significant Speaker-Ordered Transacts by Satisfaction

Transact Type	Higher SCS Mean Score	Lower SCS Mean Score	*F*
Mother one-up/Daughter one-up (M↑D↑)	.049	.094	6.248*
Mother One-Down/Daughter One-up (M↓D↑)	.067	.104	7.761**
Daughter One-up/Mother One-up (D↑M↑)	.049	.092	5.944*
Daughter One-up/Mother One-down (D↑M↓)	.057	.091	7.325**
Daughter One-across/Mother One-down (D→M↓)	.073	.059	5.270*

Note. * $p < .05$; ** $p < .01$; (d.f. = 38).

Table 29

Differences between Leveling Episodes by Satisfaction

Leveling Episode	Total	Higher SCS	Lower SCS	*t*
One-Across Leveling Episodes (→↓→↓)	319	174 55%	145 45%	1.65
One-Down Leveling Episodes (↓→↓→)	316	171 54%	145 46%	1.40

Note: * $p < .05$; (d.f. = 38). Percentages read across and are rounded.

Table 30

Differences between Leveling Episodes with Mother and Daughter as Initiator by Satisfaction

Leveling Episode	Total	Higher SCS	Lower SCS	Between-group differences *t*
One-Across Leveling Episodes (M→D↓M→D↓)	126	62 49%	64 51%	.52
(D →M↓D→M↓)	193	112 58%	81 42%	2.18*
One-Down Leveling Episodes (M↓D→M↓D→)	188	109 58%	79 42%	1.76
(D↓M→D↓M→)	127	61 48%	66 52%	.38

Note: * $p < .05$; (d.f. = 38). Percentages read across and are rounded.

pattern occurred more frequently in higher SCS dyads (x-bar = 6.22) than lower SCS dyads (x-bar = 3.68).

Symmetrical patterns, including leveling symmetry, competitive symmetry, and submissive symmetry, are presented in Tables 31-34. Likely due to the high number of one-across messages, leveling symmetry (→→→) is the most frequently occurring pattern overall and for higher SCS dyads, but was not significantly different between groups.

For lower SCS dyads, conflict episodes (↑↑↑) were more prevalent than leveling episodes. Conflict episodes were the second most commonly occurring pattern overall and for higher SCS pairs, although they were not nearly as numerous as leveling episodes among more satisfied mothers and daughters. Conflict episodes initiated by daughters occurred significantly more often in the lower SCS group ($\bar{x}$ = 27.59) than in the higher group ($\bar{x}$ = 13.56), $t(38) = 2.330$, $p = .025$. Mother-initiated conflict episodes also occurred more often in lower SCS dyads ($\bar{x}$ = 21.50) than higher SCS dyads ($\bar{x}$ = 11.83), however the difference was not significant, $t(38) = 1.840$, $p = .074$.

Among higher SCS pairs, occurrences of competitive symmetry were nearly matched with occurrences of submissive symmetry (↓↓↓), both of which significantly differed between groups. Whereas higher SCS dyads exchanged over twice as many submissive symmetrical episodes ($\bar{x}$ = 24.67) as lower SCS pairs ($\bar{x}$ = 10.86), $t(38) = 2.211$, $p = .033$, lower SCS pairs participated in nearly twice as many conflict episodes ($\bar{x}$ = 49.14) as the higher SCS group ($\bar{x}$ = 25.39), $t(38) = 2.120$, $p = .041$.

Table 31

Differences in Leveling Symmetry Episodes Overall and with Mother and Daughter as Initiator by Satisfaction

Leveling Episode	Total	Higher SCS	Lower SCS	*t*
Leveling Symmetry (→→→)	2244	1321 59%	923 41%	1.52
Leveling Symmetry (M→D→M→)	1097	632 58%	465 42%	1.40
(D→M→D→)	1147	689 60%	458 40%	1.62

Note: * $p < .05$; (d.f. = 38). Percentages read across and are rounded.

Table 32

Differences in Competitive Symmetry Episodes Overall and with Mother and Daughter as Initiator by Satisfaction

Competitive Episode	Total	Higher SCS	Lower SCS	*t*
Conflict Episodes (↑↑↑)	1538	457 30%	1081 70%	2.12*
Conflict Episodes (M↑D↑M↑)	686	213 31%	473 69%	1.40
(D↑M↑D↑)	851	244 29%	607 71%	2.33*

Note: * $p < .05$; (d.f. = 38). Percentages read across and are rounded.

Table 33

Differences in Submissive Symmetry Episodes Overall and with Mother and Daughter as Initiator by Satisfaction

Submissive Episode	Total	Higher SCS	Lower SCS	*t*
Submissive Symmetry (↓↓↓)	683	444 65%	239 35%	2.21*
Submissive Symmetry (M↓D↓M↓)	382	24 63%	140 37%	2.16*
(D↓M↓D↓)	301	202 67%	99 33%	2.21*

Note: * $p < .05$; (d.f. = 38). Percentages read across and are rounded.

Table 34

Differences in Extended Competitive Symmetry Episodes Overall and with Mother and Daughter as Initiator by Satisfaction

Competitive Episode	Total	Higher SCS	Lower SCS	*t*
Extended Conflict Episodes (↑↑↑↑↑↑)	649	195 30%	454 70%	1.50
Extended Conflict Episodes (M↑D↑M↑D↑M↑D↑)	322	97 30%	225 70%	1.34
(D↑M↑D↑M↑D↑M↑)	327	98 30%	229 70%	1.52

Note: * $p < .05$; (d.f. = 38).

Both mother-initiated and daughter-initiated submissive symmetry episodes showed significant differences between higher and lower SCS groups, with higher dyads exchanging submissive patterns more freely than lower dyads. As shown in Table 33, mother-initiated submissive sequences were twice as common in higher SCS pairs ($\bar{x}$ = 13.44) than in lower SCS pairs ($\bar{x}$ = 6.36), $t(38) = .161$, $p = .037$, and daughter-initiated submissive sequences occurred more frequently in higher SCS dyads ($\bar{x}$ = 11.22) than in lower SCS dyads ($\bar{x}$ = 4.50), $t(38) = 2.207$, $p = .033$. Of the 1,538 conflict episodes (↑↑↑), forty-two percent (649) escalated to become extended conflict episodes (↑↑↑↑↑↑). While not significantly different between groups, this intensified competitive pattern occurred over twice as often in lower SCS dyads (n = 454) than in higher SCS pairs (n = 195).

Both forms of complementarity (↑↓↑↓ and ↓↑↓↑) showed significant differences between higher and lower SCS groups and were fairly equivalent in overall occurrence and in distribution between groups. In both pattern configurations, lower SCS dyads enacted complementary exchanges far more often than higher SCS dyads. As presented in Table 35, one-up complementarity (↑↓↑↓) occurred significantly more in lower SCS dyads ($\bar{x}$ = 12.91) than higher SCS dyads ($\bar{x}$ = 6.67), $t(38) = 2.229$, $p = .032$. The effect appeared to be unidirectional however, with only daughter-initiated one-up complementarity (D↑M↓D↑M↓) showing significance, $t(38) = 2.547$, $p = .015$ (see Table 35). In this case, lower SCS pairs enacted this pattern over two times as often ($\bar{x}$ = 12.05) as higher SCS pairs ($\bar{x}$ = 5.44).

Patterns of one-down complementarity (↓↑↓↑) were nearly twice as common in lower SCS pairs ($\bar{x}$ = 15.41) than higher SCS pairs ($\bar{x}$ = 8.72), $t(38) = 2.309$, $p = .026$

Table 35

Differences in One-up Complementary Episodes Overall and with Mother and Daughter as Initiator by Satisfaction

Complementary Episode	Higher SCS	Lower SCS	Total	*t*
One-up Complementarity (↑↓↑↓)	120 30%	284 70%	404	2.23*
One-up Complementarity (M↑D↓M↑D↓)	22 54%	19 46%	41	.73
(D↑M↓D↑M↓)	98 27%	265 73%	363	2.55*

Note: * $p < .05$; (d.f. = 38).

(see Table 36). Mother-initiated one-down complementarity (M↓D↑M↓D↑) was significant, $t(38) = 2.647$, $p = .012$, and twice as common in lower SCS pairs ($\bar{x} = 14.50$) than higher SCS pairs ($\bar{x} = 7.22$). Given daughters' propensity to respond to most messages with a one-up behavior, this finding was not surprising. Daughter-initiated one-down complementarity (D↓M↑D↓M↑) was not significant, $t(38) = 1.220$, p =230.

Lag Sequential Analysis

Beyond descriptive and comparative analysis, an examination of relational structure through lag sequential analysis provides access to transactional interchanges and patterns that illuminate the relational dynamics. Sequential interactions can be evaluated statistically to identify significant forms of behavioral patterns.

Table 36

Differences in One-down Complementary Episodes Overall and with Mother and Daughter as Initiator by Satisfaction

Complementary Episode	Higher SCS	Lower SCS	Total	*t*
One-down Complementarity (↓↑↓↑)	157 32%	339 68%	496	2.31*
One-down Complementarity (M↓D↑M↓D↑)	130 29%	319 71%	449	2.65**
(D↓M↑D↓M↑)	27 57%	20 43%	47	1.22

Note: * $p < .05$; ** $p < .01$; (d.f. = 38).

As described in the results of Research Question 1, to test whether relational structure and sequential association exist in the dataset, coded interactions were analyzed using the SDIS/GSEQ and ILOG computer programs. From coded interactions, transition tables were produced that manifest the existence of sequential association between initiating (antecedent) and response (consequent) behaviors. Responses that vary based on the preceding message of the partner demonstrate relational structure. From this association, specific relational control patterns were evaluated and relational structure was assessed for an interaction overall and with each interactor as initiator.

Transition tables produced by the SDIS/GSEQ computer program offer basic information including frequency, simple probability, and conditional probability. As mentioned before, conditional probability indicates the percentage of occurrence that a

particular response code will follow a given initiating code. Conditional probability indicates the existence of sequential order. Transition tables for the higher and lower SCS groups are presented in Tables 37 and 38. Each displays the frequency and conditional probability of the nine possible transacts that occurred in these interactions. Evaluating the conditional probabilities of each group allows for informative comparisons between transact patterns in higher and lower SCS groups.

Immediately visible is the contrast in frequency of transacts between the two groups. Whereas one-across/one-across (→→) transacts are the most frequently occurring transact with high probability among the higher SCS group, in lower SCS dyads, one-up/one-up (↑↑) transacts are the most common interchange with high

Table 37

Frequencies and Conditional Probabilities of Transacts for the Higher SCS Group

	Response			
Initiator	One-Up	One-Down	One-Across	Totals
One-Up	789 (.38)	621 (.30)	680 (.33)	2090
One-Down	698 (.30)	816 (.35)	843 (.36)	2357
One-Across	586 (.17)	911 (.26)	2043 (.58)	3540
Totals	2073	2348	3566	7987

Note. Conditional probabilities are in parentheses and are rounded and total to 100 across rows.

Table 38

Frequencies and Conditional Probabilities of Transacts for the Lower SCS Group

	Response			
Initiator	OneUp	OneDown	OneAcross	Totals
OneUp	1633 (.48)	951 (.28)	824 (.24)	3408
OneDown	1081 (.45)	594 (.24)	754 (.31)	2429
OneAcross	687 (.22)	869 (.28)	1582 (.50)	3138
Totals	3401	2414	3160	8975

Note. Conditional probabilities are in parentheses and are rounded and total to 100 across rows.

probability. For lower SCS dyads, one-across/one-across (→→) transacts are the next most common exchange, followed by one-down/one-up (↓↑) transacts.

Higher SCS dyad transact frequencies are notably different in that while one-up/one-up (↑↑) transacts have a fairly high conditional probability, they are much lower in terms of frequency and are relatively balanced with one-across/one-down (→↓) transacts, one-down/one-across (↓→), and one-down/one-down (↓↓) transacts. A consistent finding thus far is the prevalent enactment of leveling symmetry followed by a balance of competitive and submissive symmetry among higher SCS groups, and among lower SCS groups, a dominant pattern of competitive symmetry followed by a balance of one-down complementarity and one-up complementarity. For lower SCS dyads, both

one-up and one-down behaviors have a high probability of being responded to with a one-up message, whereas higher SCS pairs are almost equally likely to respond with a variety of behaviors.

Conditional probability measures are helpful in identifying relational patterns, however, as previous explained, stronger indices such as Pearson's Chi-square (X^2) the Likelihood-Ratio Chi-square (G^2) and Adjusted Residual scores (Bakeman & Gottman, 1997; Bakeman & Quera, 1995; Escudero & Rogers, 2004) were used to establish relational structure. Both tables were significant, X^2 (4, N = 80) = 528.49, $p < .01$ and G^2 (4, N =80) = 530.25, $p < .01$ for Table 37, and X^2 (4, N = 80) = 673.60, $p < .01$ and G^2 (4, N =80) = 694.22, $p < .01$ for Table 38, confirming a significant association between the initiating and response behaviors. Tables 39 and 40 summarize the Adjusted Residual scores for transact combinations among higher and lower SCS groups. Again, a majority of the cells in both tables were significant with the exception of the one-up/one-down (↑↓) transact in Table 39, and the one-up/one-down (↑↓) and one-across/one-down (→↓) transacts in Table 40.

Winnowing procedures were run on both tables of adjusted residual scores to identify which transition patterns are significant and operate independent of or in conjunction with each other. In both the higher and lower SCS groups, three transacts retained significance after winnowing. In both groups, the one-across/one-up (→↑) transact and one-across/one-across (→→) transact remained significant, whereas in the higher SCS group one-up/one-up (↑↑) transacts were also significant and in the lower SCS group, one-up/one-across (↑→) transacts were significant.

Table 39

Adjusted Residual Scores for Transacts for the Higher SCS Group

	Response		
Initiator	One-up	One-down	One-across
One-up	14.32**	0.37	-12.96*
One-down	4.83*	6.63*	-10.33*
One-across	-17.10**	-6.41*	20.95**

Note. * indicates significant adjusted residual score.
** indicates significant after winnowing.

Table 40

Adjusted Residual Scores for Transacts for the Lower SCS Group

	Response		
Initiation	OneUp	OneDown	OneAcross
OneUp	15.31*	1.68	-17.12**
OneDown	7.86*	-3.18*	-5.04*
OneAcross	-22.91**	1.25	22.11**

Note. * indicates significant adjusted residual score.
** indicates significant after winnowing.

The adjusted residual index offers a statistically significant indication of which transition patterns in this dataset are influential, giving a stronger overall profile of the interaction. One limitation of adjusted residuals is that they are not an appropriate measure for carrying out parametric analysis (Escudero & Rogers, 2004; Bakeman & Gottman, 1997). Instead, Yule's Q is recommended as an index of sequential association that is not affected by the size of the sample within cells. Yule's Q is a measurement of strength of association that operates from a minimum value of -1 and a maximum value of +1. Negative values indicate inhibitory sequential association and positive values indicate activation of sequential association, with a value of zero indicating that no sequential association exists between the initiating and response behaviors.

Initially, each 3 x 3 transition table was converted to a 2 x 2 table. The Yule's Q procedure was then run on each transition that attained a significant adjusted residual score, yielding a Yule's Q score for each transition cell. In addition to providing a measurement of association for each transact of interest, Yule's Q scores can be used in parametric analyses for comparison between higher and lower SCS groups, in this case using *t*-tests.

Tables 41 through 43 summarize the Yule's Q analysis for all interactions (Table 41), and by higher and lower SCS groups (Tables 42 and 43). Transacts with significant adjusted residual scores that retained significance after the winnowing procedure are denoted by a double astrick (**) and are included in the analysis in terms of strength of association.

Table 41

Cellwise Yule's Q overall

	Consequent		
Antecedent	One-up	One-down	One-across
One-up	.37**	N/A	-.08
One-down	.52	.05	.18
One-across	-.28**	.37	.47**

Note. N/A indicates transition cell did not achieve significant adjusted residual score.
** Indicates cells that retained significance after winnowing procedure.

Table 42

Cellwise Yule's Q for the Higher SCS Group

	Consequent		
Antecedent	One-up	One-down	One-across
One-up	.37**	N/A	.03
One-down	.49	.17	.17
One-across	-.14**	.33	.45**

Note. N/A indicates transition cell did not achieve significant adjusted residual score.
** Indicates cells that retained significance after winnowing procedure.

Table 43

Cellwise Yule's Q for the Lower SCS Group

	Consequent		
Antecedent	One-up	One-down	One-across
One-up	.33	N/A	-.19**
One-down	.54	-.09	.16
One-across	-.39**	N/A	.47**

Note. N/A indicates transition cell did not achieve significant adjusted residual score.
** Indicates cells that retained significance after winnowing procedure.

In the overall set of interactions (Table 41), two transition sequences stand out as having a strong activating (+) effect and one stands out for its inhibiting (-) influence. For the most part, a similar pattern emerged between the higher and lower SCS groups with one additional inhibiting exchange. Out of the three overall significant transition cells, the strongest association is one in which one-across messages strongly activate other one-across messages (→ + →), contributing to a leveling effect that was found in both higher and lower SCS dyads. Not surprisingly, one-up behaviors were also found to strongly activate one-up behaviors (↑ + ↑) in both higher and lower SCS pairs (see Tables 42 and 43). The main overall inhibiting effect is seen in one-across messages that inhibit one-up responses (→ - ↑). This is particularly noteworthy considering that both one-up and one-down behaviors strongly activate one-up behaviors. It seems that neutralizing messages

are highly influential in avoiding competitive sequences. This inhibiting association sheds light on this communicative pattern as one that may help to curb destructive episodes of competitive symmetry. While this pattern was evident in both SCS groups, the association was substantially stronger in lower SCS dyads.

A second inhibiting association that emerged in the lower SCS group (see Table 43) was that of a one-up message inhibiting a one-across response (↑ - →) (-.19). Similar to the inhibiting association above in which one-across initiators deter one-up responses, a circular relationship exists in which one-up behaviors likewise discourage more neutralizing one-across responses. This offers particular insight into lower SCS relational dynamics in that no association was found on this transition for higher SCS dyads.

The Yule's Q index of association was also applied to the nine transact table with mother and daughter acting as initiator. Table 44 displays the significant Yule's Q associations for all transacts in the data according to mother and daughter. Tables 45 and 46 highlight Yule's Q associations for mother and daughter-initiated transacts according to higher and lower SCS groups.

Out of the nine transacts overall, eight mother-initiated transacts remained significant after winnowing (see Table 30), indicating a global existence of collaborative behavior between these interactions. Most of the eight transacts showed strong to moderately strong Yule's Q association. Mother one-across behaviors inhibiting daughter one-up responses (M→ - D↑) proved to have the strongest association of any interact, and was strong for both SCS groups but particularly so for lower SCS dyads, revealing the potent influence mothers' neutralizing behaviors has on daughter's competitive responses, especially in more distressed relationships. Further, mother one-across

Table 44

Cellwise Yule's Q for Transacts from All Dyads with Mother and Daughter as Initiator

		Response		
Initiation		One-up	One-down	One-across
One-up	M	.44**	**-.19*** **	-.36**
	D	.43**	N/A	-.40**
One-down	M	.22**	.14**	-.31**
	D	-.13	.13	N/A
One-across	M	-.58**	N/A	.54**
	D	-.38	N/A	.40**

Note. N/A indicates transition cell did not achieve significant adjusted residual score.
** indicates cells that retained significance after winnowing procedure.
*** indicates cells that retained significance after winnowing procedure and t-test at .05.

Table 45

Cellwise Yule's Q for Transacts for the Higher SCS Group with Mother and Daughter as Initiator

Initiation		Response: One-up	Response: One-down	Response: One-across
One-up	M	.41**	-.11**	-.31**
	D	.39**	N/A	-.34
One-down	M	.19**	.23**	-.33**
	D	N/A	.22	-.20
One-across	M	-.50**	-.15**	.50**
	D	-.34	-.20	.41**

Note. N/A indicates transition cell did not achieve significant adjusted residual score.
** indicates cells that retained significance after winnowing procedure.

Table 46

Cellwise Yule's Q for Transacts for the Lower SCS Group with Mother and Daughter as Initiator

Initiation		Response: One-up	Response: One-down	Response: One-across
One-up	M	.45**	-.24	-.39
	D	.43**	N/A	-.42**
One-down	M	.24	N/A	-.29
	D	-.19	N/A	.12
One-across	M	-.62**	.16	.56**
	D	-.39	N/A	.37**

Note. N/A indicates transition cell did not achieve significant adjusted residual score.
** indicates cells that retained significance after winnowing procedure.

messages strongly activate daughter one-across responses (M→ + D→) in both higher and lower SCS groups, and mother one-up messages likewise activate daughter one-up responses (M↑ + D↑) in both groups, demonstrating a pattern of symmetrical responses in both cases. Both mother one-up and mother one-down behaviors inhibited daughters responding with a one-across (M↑ - D→ and M↓ - D→) for higher but not lower SCS dyads.

Although not the strongest in association, mother one-up does inhibit daughter one-down (M↑ - D↓) indicating the unlikelihood of mothers' demands for control being returned with willingness to submit. This particular transact (M↑D↓) turned out to be the key finding as the only transact out of all six transition tables that showed significant difference between higher and lower SCS groups using a *t*-test based on Yule's Q scores, $t(38) = 2.428$, $p = .020$. Therefore, a critical difference between SCS groups appears to be that higher SCS daughters are more likely than lower SCS daughters to offer a one-down response to their mothers' one-up messages.

Only three daughter-initiated transacts remained significant following the winnowing procedure, and all three showed strong association. As was the case with Mother-initiated interacts, daughter one-up behaviors strongly activate mother one-up responses and daughter one-across behaviors strongly activate mother one-across responses, indicating a bidirectional relationship in both cases. These patterns were manifest in both higher and lower SCS groups, confirming the notable influence of one-across and one-up maneuvers in stimulating neutralizing or competitive patterns. A third transact that proved to be important in lower SCS relationships is daughters' one-up behaviors inhibiting mothers' one-across responses. While mothers appear to be less

competitive and more neutralizing overall, in more distressed dyads, mothers are less likely to remain neutral following their daughters' competitive attempts.

Summary of Research Question 2 Results

Taken together, parametric measures confirm statistical significance for several variables, transacts, and episodes, while the Yule's Q analysis of sequential relational structure confirms that relational structure does exist in this dataset among a set of related transacts. Among significant findings, mothers in this dataset asked more questions seeking support and question-extensions than did their daughters. Of those, lower SCS mothers asked the most question-extensions, although higher SCS daughters asked their mothers more question-extensions than did lower SCS daughters. While differences in support messages were not statistically significant, support scores and ratios indicated mothers were more supportive than daughters overall, and higher SCS mothers and daughters were more supportive than lower SCS mothers and daughters. Daughters, in turn, offered more nonsupport than mothers and lower SCS pairs were twice as nonsupportive as higher SCS pairs, a difference that was significant. Neutralizing extension messages were expressed significantly more often by mothers than daughters, and were more prevalent among higher SCS dyads than lower SCS dyads. Across dyads, lower SCS pairs asserted more one-up messages while higher SCS pairs offered more one-across messages. Within dyads, daughters were more domineering while mothers were more submissive.

Regarding transacts usage, leveling symmetrical transacts (→→) were the most common but did not differ significantly between higher and lower SCS groups. Several other transacts occurred significantly more often in lower SCS groups, including the one-

up/one-up, one-up/one-down, and one-down/one-up transacts. Considering speaker order, lower SCS dyads also expressed more mother one-up/daughter one-up, mother one-down/daughter one-up, daughter one-up/mother one-up, and daughter one-up/mother one-down transacts, while higher SCS dyads offered more daughter one-across/mother-one/down transacts.

Analysis of complex patterns revealed leveling symmetry (→→→) to be the most common pattern overall and in the higher SCS group, although a significant difference between groups did not exist. The second most common pattern overall and the most frequently occurring pattern among lower SCS dyads was the conflict episode (↑↑↑). Episodes that occurred significantly more in the higher SCS group included submissive symmetry (↓↓↓) overall and as initiated by either partner (M↓D↓M↓ and D↓M↓D↓), and daughter-initiated one-across leveling (D→M↓D→M↓). Significant episodes that occurred more often among lower SCS dyads included competitive symmetry (↑↑↑), which was nearly twice as prevalent as in higher SCS dyads, and daughter-initiated competitive symmetry (D↑M↑D↑). Other significant patterns included one-up complementarity (↑↓↑↓) and particularly daughter-initiated one-up complementarity (D↑M↓D↑M↓), and one-down complementarity (↓↑↓↑) and particularly mother-initiated one-down complementarity (M↓D↑M↓D↑).

Lag sequential analyses indicated leveling symmetry (→→) occurred most frequently and with high probability, especially among higher SCS pairs, followed by a balance of competitive (↑↑) and submissive (↓↓) symmetry transact patterns, then one-across and one-down leveling (→↓ and ↓→). Lower SCS pairs enacted the most competitive transacts (↑↑) followed by leveling symmetry (→→), and a balance of one-

down and one-up complementarity (↓↑ and ↑↓). Therefore, a notable difference between SCS groups is the tendency for one-down and one-up messages to produce a variety of responses in higher SCS relationships, whereas in lower SCS relationships, both one-down and one-up messages have a high probability of triggering a one-up response.

Across the sample, winnowing procedures identified one-across/one-up (→↑) and one-across/one-across (→→) patterns as influential overall. The one-up/one-up (↑↑) pattern was significant for the higher SCS sample, whereas one-up/one-across (↑→) was prevalent in the lower SCS group. The Yule's Q analysis narrowed the focus to three influential patterns overall in which leveling initiations promoted leveling responses (→+→) and inhibited competitive responses (→ - ↑), and competitive initiations promoted competitive responses (↑+↑). Additionally, in lower SCS dyads, competitive behaviors inhibited leveling responses (↑- →).

In mother-initiated transacts, two patterns stood out after winnowing. First is the notable effect of mothers' leveling behaviors in neutralizing daughters' responses. In higher and lower groups, mothers' one-across expressions consistently encouraged daughters' one-across responses (M→ + D→) and discouraged one-up responses (M→ - D↑), whereas in higher pairs, mothers' one-up or one-down moves were seen to discourage one-across responses from daughters (M↑- D→ and M↓- D→). Second, in both higher and lower groups, mothers' one-up attempts consistently begat one-up responses from daughters (M↑+D↑).

Daughter-initiated patterns among higher and lower pairs told a similar story in that daughters' competitive behaviors activated mothers' competitive responses (D↑ + M↑) and daughters' leveling behaviors activate leveling responses from mothers (D→ + M→).

Only in lower SCS dyads did daughters' competitive moves inhibit mothers offering a leveling response (↑- →).

Importantly, the mother one-up, daughter one-down (M↑D↓) transact was the single pattern to remain significant following winnowing and t-test procedures. Thus, a defining difference between higher and lower SCS groups consists in higher SCS daughters' greater willingness to respond to mothers' one-up messages with a one-down, as opposed to lower SCS daughters who were more likely to respond with a one-up or one-across.

Research Question 3 Analysis

As a way of expanding the descriptive potential of the dataset, a qualitative interaction approach was taken to address Research Question 3.

> RQ3: What behaviors (or patterns of behavior) distinguish patterned behavior and change event episodes, both as identified through the RCCCS and qualitative interaction analysis, and do these behavioral patterns or episodes differ for higher and lower SCS mother/daughter dyads?

Guided by the RCCCS and GSEQ coded analysis, and results from the previous research questions, attention was turned to points in the data that stood out as influential behavioral patterns and marked change events. To identify such events, a procedure commonly used in relational communication research was employed in which interaction turns are mapped in such a way as to visually illustrate the flow of an interaction. To produce a graphic display, each speech turn in the sequential chain is charted according to its control direction as ascribed by the coding scheme. One-up control maneuvers are assigned a value of +1, one-down maneuvers a value of -1, and one-across maneuvers a value of 0. Transacts beginning with a one-across message are diagrammed beginning at

Line 0 on the graph, whereas transacts beginning with a one-up message are diagrammed beginning at Line 1 to indicate the upward direction of the initial message, and transacts beginning with a one-down message begin at Line -1 indicating the downward direction. The resulting graph depicts the accumulated movement of each interaction sequence, providing a continuous representation of behavior, patterns of behavior, and turning points within the interaction.

Once behavioral patterns and turning points were identified, properties and nuances within the text were considered and compared with an eye toward differences between higher and lower SCS groups. Following the logical structure of the case comparison method (Fairhurst, 1993), examples and counter-examples were extracted from the discourse that drew textual and behavioral distinctions between mother-daughter relationships in higher and lower groups. Methodologically, argument by example does not necessarily infer frequency or typicality of communication patterns but rather begins to "define the range of communicative possibilities" (Fairhurst, 1993, p. 325), however the patterns highlighted in the present discussion generally represent larger themes or trends within mother/daughter relationships in this dataset.

Results revealed four predominant patterns in the data set that were particularly appropriate for interpretive analysis: submissive symmetrical patterns (↓↓↓), competitive symmetrical patterns (↑↑↑), rigid complementarity (↓↑↓↑), and the mother one-up, daughter one-down (M↑D↓) transact. Each will be discussed in turn as to content and relational differences found between higher and lower SCS groups and the implications therein.

Submissive Symmetrical Patterns in Higher SCS Relationships

A significant pattern distinguishing higher SCS relationships is that of submissive symmetry (↓↓↓), which in this dataset, occurred twice as frequently among higher dyads than lower. Sequences of one-down exchanges may include expressing agreement, support, appreciation, understanding, forgiveness, deference, compliments, apologies, and asking questions. Most one-down expressions tend to infuse conversations with positivity, as can be seen in the following exchanges. Specifically, this pattern illustrated a proclivity among higher SCS pairs to 1) openly express affection, respect, and gratitude, 2) offer physical and relational support, and 3) apologize and grant forgiveness. Caring exchanges like those in the following examples marked the conversations of higher dyads.

Note: Italics indicate paralinguistic and nonverbal descriptions and are not content.
Brackets [ ] signify successful talkovers.
Parentheses ( ) signify unsuccessful talkovers.
000 indicates silence of 5 seconds or more.
999 indicates laughter.

Dyad #8, Topic 4 (see Figure 1)

1	**M:**	[I think I tell you how great you are and how wonderful you are and]	131	↓
2	**D:**	(that helps, just like confidence boost)	241	↓
3	**M:**	how much I appreciate everything you do, you know, having respect for me.	111	↓
4	**D:**	I let you know that you're a good mom too.	211	↓
5	**M:**	I know, you do all the time. And I feel it, so… I hope you feel it.	111	↓
6	**D:**	I do.	211	↓

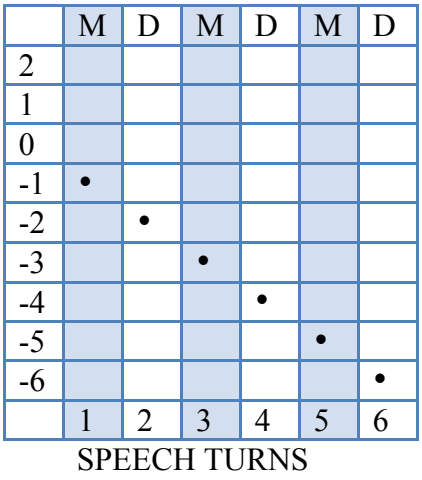

Figure 1. Cumulative Graphic Display – Dyad #8

Dyad #9, Topic 4 (see Figure 2)

1	**M:**	[Anything else you can think of that would be important? So, doing things together, being able to talk to each other, having support.]	133	→
2	**D:**	Having support… *mirroring Mom's phrase* What's something a daughter could do for her mother?	223	→
3	**M:**	Ohhh… *happily* Help me in the house. Like cleaning and cooking.	114	↑
4	**D:**	Do I do that?	221	↓
5	**M:**	Yeah. Pretty good. What about…	111	↓
6	**D:**	[Wait, speaking of, you need to come up with more chores for me.]	216	↑
7	**M:**	Oh, yeah. Oh, very nice, I like that.	111	↓
8	**D:**	Well, I need to earn money and	213	→
9	**M:**	(you can dust for me)	146	↑
10	**D:**	I like to help you.	211	↓
11	**M:**	Oh, good. I need lots of help.	111	↓
12	**D:**	You know my biggest priority is to make sure you're happy. *sincerely*	211	↓
13	**M:**	I know. I love that about you. That you're concerned. And it makes me happy when you help me because I can't do it all by myself.	111	↓
14	**D:**	I'm aware of that. *understanding*	211	↓
15	**M:**	I'm glad you want to help me.	111	↓

	M	D	M	D	M	D	M	D	M	D	M	D	M	D	M
3															
2															
1			•												
0	•	•		•		•			•						
-1					•		•	•		•					
-2											•				
-3												•			
-4													•		
-5														•	
-6															•
-7															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

Figure 2. Cumulative Graphic Display – Dyad #9

Acknowledging the other's contribution to the relationship in statements such as "you do all the time" (Dyad #8, Line 5) and "I love that about you" (Dyad #9, Line 13) offered validation that the other's relational efforts were noticed and accepted. Open expressions of caring such as, "I hope you feel it" (Dyad #8, Line 5), "I like to help you" (Dyad #9, Line 10) and "my biggest priority is to make sure you're happy" (Dyad #9, Line 12) served to assure partners of their relational worth and importance to the other. While requests to receive more chore assignments as in Dyad #9 were not common per se, all categories of support outlined by Cutrona and Suhr (1994) including emotional support, esteem support, network support, informational support, and tangible support emerged regularly in higher SCS conversations and were generally met with gratitude and reciprocated support or positivity.

A final characteristic marking one-down sequences in higher pairs was a readiness to apologize and forgive, something not as commonly manifest in lower pairs. The exchange below reveals this mother and daughter's heightened sensitivity for each other's feelings in regards to a topic that could otherwise be a contentious issue—spending money.

Dyad #12, Topic 1 (see Figure 3)

1	**D:**	Yeah, shopping just is not our thing.	213	→
2	**M:**	Yeah. That's okay.	111	↓
3	**D:**	Yeah. I mean if we had like all the money in the world	213	→
4	**M:**	(I think it would be way fun)	141	↓
5	**D:**	It would be way fun cuz you'd get stuff too.	211	↓
6	**M:**	Yeah, I'm always thinking about that cha-ching in the background.	113	→
7	**D:**	A little bit.	211	↓
8	**M:**	Sorry, I wish I could offer you more. *sincerely*	111	↓
9	**D:**	That's okay. No worries. *sweetly*	211	↓
10	**M:**	I love you.	111	↓
11	**D:**	I love you too!	211	↓
12	**M:**	I just love any time I can see you and spend with you.	111	↓
13	**D:**	Same! Like INDISTINGUISHABLE	211	↓
14	**M:**	You're an understanding little girl too.	111	↓
15	**D:**	Thank you. Ummmmmm…..	211	↓

Particularly unique in this interaction is the daughter's disinclination to blame her mother or to attribute negative reasons for her mother not spending more money on her ("…if we had all the money in the world" Line 3). Also distinctive is the mother's desire to apologize for not having more to give ("Sorry, I wish I could offer you more" Line 8), which is readily pardoned and minimized by the daughter ("No worries" Line 9).

	D	M	D	M	D	M	D	M	D	M	D	M	D	M	D
2															
1															
0	•														
-1		•	•												
-2				•											
-3					•	•									
-4							•								
-5								•							
-6									•						
-7										•					
-8											•				
-9												•			
-10													•		
-11														•	
-12															•
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

SPEECH TURNS

Figure 3. Cumulative Graphic Display – Dyad #12

As depicted here, patterns of submissive symmetry in higher SCS relationships were marked by open expressions of love and acknowledgment, appreciation and caring, and apology and forgiveness, all of which appeared to promote positive and nurturing relationships that, in turn, seemed to minimize the amount and negative effect of conflict, as will be discussed later.

Submissive Symmetrical Patterns and Rigid Complementarity in Lower SCS Relationships

In contrast to higher dyads, lower SCS mothers and daughters not only had fewer instances of one-down symmetrical sequences, but when they did occur they did not last as long, lacked the warmth and nurturance of higher dyads' submissive exchanges, and

were often interspersed with domineering or dominant maneuvers. Instead of focusing on building up the other or the relationship, lower SCS one-down exchanges often revolved around a problem being discussed or embodied a series of questions that invoked agreement but not necessarily support. In the following passage, the mother is looking for her daughter to be more open in disclosing things with her:

Dyad #26, Topic 4 (see Figure 4)

M:	So maybe you could say, "I want to tell you some stuff but I don't want any advice. I just want you to listen to me."	115	↑
D:	Yeah.	211	↓
M:	Do you think we could do that? *hopeful*	121	↓
D:	Yeah.	211	↓
M:	Cause I'd love to hear about all that stuff. But if you don't want me to offer any advice then I won't offer any advice	111	↓
D:	[No, cause your advice would be like, "You're too young."] *contrary tone, defensive*	232	↑

	M	D	M	D	M	D
4						
3						
2						
1	•					
0		•				
-1			•			
-2				•		•
-3					•	
-4						
	1	2	3	4	5	6

SPEECH TURNS

Figure 4. Cumulative Graphic Display – Dyad #26

Here, the one-down pattern persists for four turns as the daughter agrees to confide in her mother following her mother's assurance that she will refrain from giving advice; however, the collaborative tone is cut short by the daughter's quick criticism of her mother's advice, bringing a prompt end to the submissive sequence.

The exchange in the next pair (Dyad #20) illustrates more one-down symmetry, although in this case, the one-down expressions are notably lacking in positive relational sentiment and come across as insincere agreement. One-down attempts are continually interrupted by both partners' one-up interjections and are eventually derailed by the daughter's one-ups until the one-down sequence transitions into a pattern of rigid complementarity in which this mother, still attempting to engage her daughter in an emotionally open one-down exchange is confronted with a series of one-up responses. Previous to this point in the conversation, the mother had been attempting, without success, to persuade her daughter to participate in family activities, such as an upcoming St. Patrick's Day parade, instead of going out with friends.

Dyad #20, Topic 4 (see Figure 5)

1	**M:**	[Would you be sad if you didn't have a family?] *soliciting*	131	↓
2	**D:**	Yes. *quietly, without emotion*	211	↓
3	**M:**	Would you be lonely? *soliciting*	131	↓
4	**D:**	Yes. *still quiet, without emotion*	211	↓
5	**M:**	I think you would be too.	111	↓
6	**D:**	Yeah.	211	↓
7	**M:**	I think we should do other things. I think we could do lots of cool stuff together. *trying to build excitement*	111	↓
8	**D:**	(hmm) *flatly*	240	→
9	**M:**	Like, go to the parade on Saturday	113	→
10	**D:**	(yeah) *flatly*	241	↓
11	**M:**	we'll have some sort of green breakfast *excited*	111	↓
12	**D:**	Okay *half-heartedly agrees*	211	↓
13	**M:**	we'll drink some sort of green beverage	111	↓

	M	D	M	D	M	D	M	D	M	D	M	D	M	D	M	D	M	D	M	D
1																				
0	•																			
-1		•																		
-2			•																	
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-10													•							
-11														•	•	•		•		•
-12																	•		•	
-13																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

SPEECH TURNS

	M	D	M	D	M	D	M	D	M	D	M	D	M	D	M	D	M	D	M	D
-9																				
-10	•																			
-11		•																		
-12			•																	
-13				•				•		•		•		•		•		•		•
-14					•		•		•		•		•		•		•		•	
-15						•														
-16																				
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

SPEECH TURNS

Figure 5. Cumulative Graphic Display – Dyad #20

14	**D:**	Okay *blandly*	211	↓
15	**M:**	It's gonna rain, so we'll be out in the rain.	113	→
16	**D:**	(hmm)	240	→
17	**M:**	So we'll have our parade rained on. It's at the Gateway – we can go shop. I can help you pick out stuff.	111	↓
18	**D:**	*Shakes her head "no" fervently*	202	↑
19	**M:**	I'm really good at it though.	111	↓
20	**D:**	INDISTINGUISHABLE… I like my friends to pick out stuff with me.	212	↑
21	**M:**	You just don't want to do anything with me at all.	112	↑
22	**D:**	No, I'll come with you to the parade. *unenthusiastically*	211	↓
23	**M:**	You're going to come with me to the parade?	121	↓
24	**D:**	Mm hmm. *quietly*	211	↓
25	**M:**	So you're going to ride the train with me to the parade?	121	↓
26	**D:**	(yeah)	241	↓
27	**M:**	and then leave and go hang out with your friends and then come back, and leave with me.	122	↑
28	**D:**	Yes.	214	↑
29	**M:**	What can we do to make this better? *discouraged* What could I do that would make me a more fun mom that you'd want to hang out with?	121	↓
30	**D:**	I don't know.	214	↑
31	**M:**	Nothing? There's nothing I could possibly do? *desperate*	121	↓
32	**D:**	I can't think of anything.	214	↑
33	**M:**	[Do you want me to drive all your friends around?]	131	↓
34	**D:**	No.	212	↑
35	**M:**	I can do that. Do you want me to sneak into movies with you?	121	↓
36	**D:**	Mm mm. *shakes head "no"*	212	↑
37	**M:**	Do you want me to go the mall and hang out with you?	121	↓
38	**D:**	No.	212	↑
39	**M:**	But I will, if you want me to.	111	↓
40	**D:**	I don't want you to.	212	↑

This mother's attempts to foster a closer, more friendly relationship with her daughter only mildly succeed in temporary bouts of submissive symmetry. The daughter admits she would be lonely without family (Lines 2 and 4) but continues to resist her

mother's invitations for togetherness (Lines 8, 12, 14, 16, 18, 22, 28, 34, 36, 38 and 40). Her eventual appeasement in agreeing to go to the parade (Line 22) results in a brief string of one-down exchanges (Lines 22, 24 and 26) that turn out to be more placating than sincere and ultimately end in the mother's disappointing realization that her daughter had no intention of spending time with her (Line 27).

In contrast to the more collaborative and confirming tone of higher SCS pairs' submissive episodes, the one-down offerings in lower SCS dyads generally depicted expressions of mothers' support-seeking (or occasionally giving) returned with passive agreement or appeasement by the daughter, culminating in less harmonious sequences of rigid complementarity (M↓D↑).

In this data set, complementarity in both configurations (↑↓↑↓ and ↓↑↓↑) occurred significantly more often in the lower group (70% to 30% and 68% to 32% respectively). Rigid complementarity in which daughters expressed a one-up position and mothers a one-down, (D↑M↓D↑M↓ and M↓D↑M↓D↑), also occurred significantly more often in lower SCS dyads than higher (73% to 27% and 71% to 29%). While not considered conflict by definition, rigid complementary interchanges were frequently contentious, as evidenced by lower SCS daughters' oppositional responses to mothers' seeking or offering support, information, or explanation.

In the following example of rigid complementarity in a lower SCS relationship, the mother (Dyad #28) holds her ground in denying her daughter permission to stay alone at a friend's house but does so through a series of supportive one-down offerings to which her daughter responds consistently with challenging and resentful one-ups.

Dyad #28, Topic 2 (see Figure 6)

1	**D:**	Yeah, Angie isn't like that. *heatedly*	212	↑
2	**M:**	I know she's not. If I hadn't had that rule set up beforehand, Courtney would have gotten in trouble with those guys. Just cuz of the dumb stuff they do. *calmly*	111	↓
3	**D:**	Well, uh! *frustrated*	212	↑
4	**M:**	Boys especially will do dumb stuff when parents aren't around.	113	→
5	**D:**	Kay. *exasperated* Me and Angie. Do. Not. Know. Any. Boys.	212	↑
6	**M:**	(I know honey) *kindly*	141	↓
7	**D:**	We are not, well, UGH!!!! *angry*	212	↑
8	**M:**	[I'm not judging you on that situation. I'm not saying that's what you guys do. We could go on and on with this.]	131	↓
9	**D:**	Well, ..! *frustrated*	212	↑
10	**M:**	I know it's frustrating. Can you trust me?	121	↓
11	**D:**	No! Because you can't trust me.	212	↑
12	**M:**	I do trust you.	111	↓
13	**D:**	No, you don't!	212	↑
14	**M:**	Just cuz I set up rules to protect you doesn't mean…	112	↑
15	**D:**	Rules to protect me, yeah, because me and Angie know so many people that we're going to have a huge party at Angie's house and we're going to do drugs and we're going to bring alcohol and we're going to heavy sarcasm	212	↑
16	**M:**	[No. That doesn't have anything to do with it.] reassuring	131	↓

Rigid complementarity in which daughters return disagreeable responses regardless of their mother's attempts to offer or seek support emerged as a defining characteristic of lower SCS relationships in this dataset.

	D	M	D	M	D	M	D	M	D	M	D	M	D	M	D	M
5																
4																
3															•	
2														•		•
1					•		•		•		•		•			
0	•		•	•		•		•		•		•				
-1		•														
-2																
-3																
-4																
-5																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

SPEECH TURNS

Figure 6. Cumulative Graphic Display – Dyad #28

Competitive Symmetry (↑↑↑) in Lower SCS Relationships

Episodes of competitive symmetry (↑↑↑) occurred more frequently in lower SCS dyads (70%) than in higher (30%), and in nearly the same proportion for daughter-initiated competitive symmetry (D↑M↑D↑) (71% to 29%), a difference that was statistically significant. Although not significant, extended competitive episodes consisting of six consecutive one-up exchanges (↑↑↑↑↑↑) occurred twice as often in lower SCS dyads than higher.

A closer look at the content and relational messages of lower SCS pairs' conflict episodes revealed a recurrence of several communicative characteristics, namely a tendency to: 1) blame other and dispute personal accountability; 2) wage criticism of other's character without acknowledging their strengths or contributions to the relationship; 3) ascribe negative attributions for other's behavior; 4) neglect to make or accept repair attempts; 5) demonstrate an unwillingness to be influenced or change

behavior; 6) issue challenging or oppositional questions, 7) consider disagreement as personal rejection, and 8) perpetuate and escalate negative exchanges. Not all of the above characteristics marked every lower SCS conflict but clusters of several of the above behaviors were consistent in a majority.

The following conversation from Dyad #29 demonstrates an extended conflict sequence of a lower SCS dyad in which most of the elements above are enacted. Preceding this conversation, the daughter had complained that her mother yells too much about her not doing her homework, to which the mother criticized the daughter for not taking responsibility for herself. Due to the excessive length of the disagreement in full, only a portion of the conflict dialogue is included below. To give a sense of the duration and progression of escalating symmetry leading up to this point, 60 of the 68 turns preceding the conflict below were one-up maneuvers.

Dyad #29, Topic 4 (see Figure 7)

1	**D:**	Well, I assume that you exaggerate things so much! Like, you get so fired up and you're so, you're mad in just one second! *passionate, angry*	212	↑
2	**M:**	(well) *disagreeing, justifying*	142	↑
3	**D:**	You go from being happy to mad like you have bipolar disease!	212	↑
4	**M:**	No, it's things added on top of each other to the point where now, then, yeah, "That's it! No more patience!"	112	↑
5	**D:**	But the thing is, you get mad about Mimi or Jade or some family problem and then you throw it at me because I do one little thing wrong. It's like you have all these things build up from the day *critical/accusatory*	212	↑
6	**M:**	(Well) *defensively*	142	↑
7	**D:**	and then when I get home it's like you get so mad if I do one thing or if I say one thing or if I'm too loud you YELL at me, and that's how Dad is too.	212	↑

	D	M	D	M	D	M	D	M	D	M	D	M	D	M	D	M	D
16																	
15																•	
14															•		•
13														•			
12													•				
11												•					
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8									•								
7								•									
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5						•											
4					•												
3				•													
2			•														
1		•															
0	•																
-1																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

SPEECH TURNS

	M	D	M	D	M	D	M	D	M	D	M	D	M	D	M	D	M
26																	
25																	•
24																•	
23												•		•	•		
22											•		•				
21										•							
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18				•		•											
17			•		•												
16		•															
15	•																
14																	
	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34

SPEECH TURNS

Figure 7. Cumulative Graphic Display – Dyad #29

8	**M:**	Well, we have no control over other people outside our family and the things that they are doing, but we should have some control over your education, defensively	112	↑
9	**D:**	[But I'm TALKING ABOUT YOU! I'm talking about how YOU get upset about what happens while you're in YOUR day, while you're out doing whatever YOU'RE doing and people make you mad and you come home and get mad at ME cuz you're upset. Accusatory/angry	232	↑
10	**M:**	[IF!… IF you haven't done what you were supposed to, it's like, "Okay, one more thing, one more person that is not following through," which is you, and then that kind of, yeah, breaks the camel's back.] defensive and accusatory	132	↑
11	**D:**	[Yeah, but that doesn't mean you have to get so upset at me because you had other things going wrong in your day! *heated* Like with Dad, sometimes, it's not that he doesn't have problems at work, I hear from Jared that he gets mad at work because people don't do what they are supposed to,	232	↑
12	**M:**	(Yeah) *like "what's you're point?"*	142	↑
13	**D:**	they aren't following the rules, and so Dad says that everything is perfect at work.	212	↑
14	**M:**	(So???? No!!!)	142	↑
15	**D:**	So, it's not perfect at work. *accusatory*	212	↑
16	**M:**	(No, but) *defensively*	142	↑
17	**D:**	So, when he comes home, like, if I put a plate on the table too loud, he gets, he yells at me and says, "Don't be so loud!" You know? *seeking understanding/compassion*	211	↓
18	**M:**	What he doesn't want, what we don't want, what I don't want is to create a person to put out in the world like what he's complained about that he has to deal with. Someone that doesn't follow through, that doesn't keep their word, is not responsible, that you can't count on. And, when we see that in our kids we want that characteristic cleaned up, fixed, so that you're not another contributing factor out in the world, like there are so many other losers out there.	112	↑

19	**D:**	(Uuhh) *resistant sigh*	242	↑
20	**M:**	That you can't count on. We want you to be a good	112	↑
21	**D:**	[Yeah, but I'm a whole lot smarter than you think I am] *defensive, offended*	232	↑
22	**M:**	I'm sure you are. *briskly but seems sincere*	111	↓
23	**D:**	Like, I understand things a lot more than you think I do.	212	↑
24	**M:**	I'm sure you do and that's scary. *laughing, seems sarcastic*	112	↑
25	**D:**	Why is that scary? *irritated/offended/confused.*	222	↑
26	**M:**	I…. *doesn't seem to know how to finish*	153	→
27	**D:**	You just don't understand me. *serious, seems hurt.*	212	↑
28	**M:**	(well) *defensively*	142	↑
29	**D:**	Cuz you haven't taken time to get to know me. *accusatorily*	212	↑
30	**M:**	Yes, I *softly, slowly*	111	↓
31	**D:**	[You don't, KNOW me. You just know me as your daughter.] *serious, angry*	232	↑
32	**M:**	(Okay) *conceding, not sure if sincere or pacifying*	143	→
33	**D:**	There's a difference. You just need to cool your horses. s*erious but calming down*	216	↑
34	**M:**	And you need to be more responsible. *serious but calming down*	116	↑

The visual depiction in Figure 7 portrays the relentlessly escalating opposition dominating this relationship and an analysis of the dialogue illustrates the enactment of nearly all of the lower SCS conflict characteristics mentioned above. Blame and criticism abound in accusations of having bipolar-like mood swings (Line 3) and not following through (Line 10), with no acknowledgment by either partner of their own imperfections or of the other's virtues. The mother's attempt at lessening the tension through sarcastic humor (Line 24) – a potential repair attempt –falls flat as the daughter interprets the joke as an ill-intentioned slight (Line 25). The daughter's petition for a show of understanding

or compassion from her mother about her dad's yelling ("You know?" Line 17) is dismissed as the mother jumps to her husband's defense by justifying his frustration (Line 18). The daughter again attributes negative motives to her mom's lack of effort to get to know her (Lines 27, 29, 31), an accusation which her mother neither defends nor seeks to repair (Lines 28, 30, 32) yet it triggers a turning point as the mother's disarmed reaction disrupts the negative spiral and moves the conflict toward its culmination. At no point does either partner demonstrate an attempt to listen intently, respond to the other's complaint, apologize, or change behavior. The lengthy and emotional episode is finally concluded with a mandate by each about the other's need to improve (Lines 33 and 34).

In a second example of competitive symmetry from lower SCS Dyad #5, mother and daughter discuss a similar topic of homework and responsibility. Evident in this segment are many of the lower SCS conflict characteristics discussed above, including high criticism from the mother along with an unwillingness to let go of the daughter's past failures and acknowledge her current successes. The daughter, in turn, resists taking accountability for her past lapses in responsibility and faults her mother for not moving beyond them. Particularly prominent in this exchange is the mother's excessive use of nonsupportive questions, which drive the escalation of conflict. As has been noted, mothers in this study asked three times as many questions as daughters, with lower SCS mothers making more inquiries than higher mothers, and lower mothers and daughters posing more nonsupportive questions than higher mothers and daughters. These factors, along with several unsuccessful repair attempts perpetuate the negativity and lengthy duration of their argument. Due to excessive length, Lines 48-61 are omitted from the transcript below, although the pattern of competitive symmetry persisted throughout.

Dyad #5, Topic 3 (see Figure 8)

1	**D:**	Sometimes I feel like you choke up too tight on my homework and that all of, well not all of my friends, like Kaylie are, her parents don't really pay attention that much, and she does really, really good. And	212	↑
2	**M:**	(but didn't I) *defensive*	142	↑
3	**D:**	if I need the help then I can ask.	212	↑
4	**M:**	But didn't I back off on you the first part of the semester until parent teacher conferences, and I didn't really check power school and I wasn't really watching it until just before parent-teacher conference? *challenging & defensive*	122	↑
5	**D:**	[for the most part] *defensive*	232	↑
6	**M:**	And what happened when I finally looked at your grades? challenging	122	↑
7	**D:**	They weren't very good in one class.	214	↑
8	**M:**	Why? firmly	122	↑
9	**D:**	Cause, giggles, I don't like the teacher.	214	↑
10	**M:**	Well I know you don't like the teacher Sydney, but you still have to do the work, because that's the way life is. stern tone	112	↑
11	**D:**	[I know] defensively	232	↑
12	**M:**	Right? And you have to pass the class to graduate, right? You have to get	122	↑
13	**D:**	(um)	240	→
14	**M:**	a passing grade, right? belligerent	122	↑
15	**D:**	Yeah.	211	↓
16	**M:**	Mmmmkay. So don't you think it's important that if you're not going to stay on task, that I have to check up on you to make sure that that's happening? I also told ya about the requirements for you to be able to drive, right? challenging	122	↑
17	**D:**	Yeah.	214	↑
18	**M:**	So, what's that rule? challenging, condescending	122	↑
19	**D:**	It was bad, but I brought it up. defensive	212	↑
20	**M:**	Yeah, but are you going to get a 3.0 on your report card now, at the end of the tri- ?	122	↑
21	**D:**	[I'm doing the best I can] defensive	232	↑

	D	M	D	M	D	M	D	M	D	M	D	M	D	M	D	M
12																
13														•		•
12												•	•		•	
11											•					
10										•						
9									•							
8								•								
7							•									
6						•										
5					•											
4				•												
3			•													
2		•														
1	•															
0																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

SPEECH TURNS

	D	M	D	M	D	M	D	M	D	M	D	M	D	M	D	M
26																
25																•
24															•	
23														•		
22													•			
21												•				
20											•					
19								•		•						
18							•		•							
17						•										
16					•											
15				•												
14			•													
13		•														
12	•															
	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32

SPEECH TURNS

Figure 8. Cumulative Graphic Display – Dyad #5

	D	M	D	M	D	M	D	M	D	M	D	M	D	M	D
41															
40															•
39														•	
38													•		
37												•			
36											•				
35										•					
34									•						
33								•							
32							•								
31						•									
30					•										
29				•											
28			•												
27		•													
26	•														
	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47

SPEECH TURNS

	M	D	M	D	M	D	M	D	M	D	M	D	M	D	M
67															
66															•
65														•	
64													•		
63												•			
62											•				
61										•					
60									•						
59								•							
58							•								
57						•									
56					•										
55				•											
54	•		•												
53		•													
	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76

SPEECH TURNS

Figure 8 (continued). Cumulative Graphic Display – Dyad #5

	D	M	D	M	D	M	D	M	D	M	D	M	D	M	D	M
7																
6															•	•
5														•		
4												•	•			
3											•					
2										•						
1									•							
0								•								
-1							•									
-2						•										
-3					•											
-4				•												
-5			•													
-6		•														
-7	•															
	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92

SPEECH TURNS

Figure 8 (continued). Cumulative Graphic Display – Dyad #5

22	**M:**	After the fact, after we had a big blow up and I've been checking power school on a regular basis, right? *irritated*	122	↑
23	**D:**	Nnn..yeah. Not in chemistry. *defensive*	212	↑
24	**M:**	Well, you apply yourself in some classes and not others; isn't that correct? *accusingly*	122	↑
25	**D:**	Mmmhmm..	211	↓
26	**M:**	Nnnkay. I just think that as a mother I have an obligation to check up on you periodically and making sure that you're being	112	↑
27	**D:**	[but being uptight doesn't always help]	232	↑
28	**M:**	Yeah, but when you tell me that you're taking responsibility and you're doing it and then I look on power school and then I see that you're not..What would you do if you were in my shoes? *frustrated*	122	↑
29	**D:**	I don't know cause I'm not. *dismissing*	212	↑
30	**M:**	Well, what would you do?! *pressing*	122	↑
31	**D:**	I don't know! *annoyed*	212	↑
32	**M:**	Yeah, but you've got to think about that.	112	↑
33	**D:**	I'm not a mom yet.	212	↑
34	**M:**	[Put yourself in my place, okay? I mean, what would you do if your daughter said, "Yeah, I'll, I'll, I'll watch it and I'll check on my grades", you know? When was the last time you came to me and pulled a printed your own schedule and said, "Look mom, I'm staying on top of it; I did this and this and this, look mom"	136	↑
35	**D:**	(I didn't know I had to do that!) *defensively*	242	↑
36	**M:**	my assignments are turned it. Well! I'm not saying you had to, but wouldn't that be a way for me to know that you were doing what you said you were going to do?	122	↑
37	**D:**	You don't need to know. Just, *sassy*	212	↑
38	**M:**	Well if I wouldn't have!	112	↑
39	**D:**	[INDISTINGUISHABLE] *same sassy voice*	232	↑
40	**M:**	Well if I wouldn't have, what would have happened?	122	↑
41	**D:**	You're just *defensive*	252	↑
42	**M:**	(after)	142	↑
43	**D:**	the past, Mom, that stuff's all done.	212	↑
44	**M:**	So what's the solution? *challenging voice*	122	↑

45	**D:**	My grades now are going up, I'm trying, I'm doing the best I can.	212	↑
46	**M:**	I think you just need to put a little bit more emphasis on your school work and a little less emphasis on your social.	116	↑
47	**D:**	You've seen my grades this past while, they're good. *defending*	212	↑
		ESCALATION CONTINUES FROM LINES 48-61 REGARDING SUMMER BOOK READING WHICH DAUGHTER DID NOT COMPLETE, THEN RESUMES:		
62	**M:**	The issue is, is we have a big argument and lots of big discussions about your grades, right?	122	↑
63	**D:**	*Nods*	211	↓
64	**M:**	.... And what's the easiest way to avoid those? *lecture voice*	122	↑
65	**D:**	By keeping them up. *matter of factly*	214	↑
66	**M:**	Sooo, if you agree to your end of the bargain	112	↑
67	**D:**	[You're just going back to it all!] *frustrated*	232	↑
68	**M:**	Well, I'm just repeating!	112	↑
69	**D:**	Kay, well I'm already going up. *defensively*	212	↑
70	**M:**	[So if you'll do that then I'll hold on, I'll deal with my side of the bargain too, right? And I won't give you a hard time.	132	↑
71	**D:**	Well, it's already been discussed. *short*	212	↑
72	**M:**	Okay. So is that the deal? *challenging,*	122	↑
73	**D:**	It has been for the past two months.	212	↑
74	**M:**	Mmmkay. But if I get on there and I see missing papers, then I can	112	↑
75	**D:**	[you already do!] *angry*	232	↑
76	**M:**	ask for an explanation, right? Because that's the deal. *challenging*	122	↑
77	**D:**	Your deal! *sassy and annoyed*	212	↑
78	**M:**	And what do you want to do? What do you think you should do about it? *challenging*	122	↑
79	**D:**	I can do it myself. You don't need to hound me like a dog.	212	↑
80	**M:**	I don't think I hound you like a dog	112	↑
81	**D:**	[I think you do.] *strongly*	232	↑
82	**M:**	I just follow you to make sure you stay on task. Well	112	↑

83	**D:**	[But that doesn't always help.]	232	↑
84	**M:**	But Sydney, I let you do it and you didn't do anything!	112	↑
85	**D:**	Look at me now!	212	↑
86	**M:**	Well, that's fine now! Right, you are improving, but why did we have to have a big blow up and why didn't you do that from the very beginning?! Just cause you didn't like the teacher?!	122	↑
87	**D:**	It was the start of school, Mom! I've got to get back on track from summer and everything too! I'm not the only one. Ask a-n-y-b-o-d-y.	212	↑
88	**M:**	000. Whatever! *Dismissing*	112	↑
89	**D:**	Kay. *Annoyed*	213	→
90	**M:**	Alright. PAUSE Are we done with this topic?	129	↑
91	**D:**	*nods "yes" with nervous laugh 999*	214	↑
92	**M:**	Okay. I think we're done. That was a touchy one.	113	→

The tenor of nonsupportive questions in this discussion ranged from condescension, "And what happened when I finally looked at your grades?" (Line 6) to interrogation, "Well, you apply yourself in some classes and not others; isn't that correct?" (Line 24) to lecturing, "And what's the easiest way to avoid those?" (Line 64)—and all received a similarly defensive response ranging from "I don't know" (Line 31), to "You don't need to know" (Line 37), to "It's already been discussed" (Line 71). The missing piece preventing this conversation from moving beyond the perpetual replaying of this argument seemed to be acknowledgment – specifically, the daughter's acknowledgment of past failures and the mother's acknowledgement of her daughter's present success. The mother's critical reminders of her daughter's past negligence ("But Sydney, I let you do it and you didn't do anything!" Line 84; and "Well, that's fine now! Right, you are improving, but why did we have to have a big blow up and why didn't you do that from

the very beginning?!" Line 86) indicates the unlikelihood that past infractions will be forgotten until the daughter has acknowledged her accountability for them, although such a resolution appears to be beyond the daughter's awareness or willingness. Without it, the daughter faces an uphill effort to obtain the acknowledgment she desires for what she sees as improvement in her current performance ("Look at me now!" Line 85; "You're just going back to it all" Line 67; and "I can do it myself" Line 79).

With the mother's focus firmly on the past and the daughter's attention on the present, their relationship remains stuck in a relational vortex of criticism and defensiveness, each intent on defending her position of "rightness" until the conversation culminates with a disqualifying dismissal from the mother ("Whatever!" Line 88), followed by the daughter's discordant acceptance of the end of the conversation ("Kay" *annoyed,* Line 89).

The above examples embody the heightened negativity that generally defined conflict episodes among lower mother-daughter relationships. Blame, criticism, abdication of personal responsibility, attributing negative intentions to the other, failed repair attempts, unwillingness to accept the other's influence, nonsupportive questions, anger, and prolonged and destructive conflict cycles all contributed to more frequent and unsatisfying patterns of competitive symmetry in lower SCS dyads.

Competitive Symmetry in Higher SCS Relationships

Higher SCS mothers and daughters also engaged in episodes of competitive symmetry, although less often and using fewer negative behaviors. One-up symmetry among higher SCS dyads was typically aided by some combination of the following relationship-enhancing characteristics: 1) acknowledgement of the other's positive

qualities and strengths; 2) willingness to admit personal shortcomings; 3) validating other's perspective and emotions; 4) collaborative problem-solving; 5) offering and accepting repair attempts; 6) accepting the other's influence (especially daughters toward mothers); 7) minimizing the meaning and impact of disagreements; 8) humor and positivity; and 9) shorter and less negative conflict episodes.

The following episode, while lengthy for a higher SCS pair, reflects a disagreement equal in conviction to those of the lower pairs but managed more successfully.

Dyad #16, Topic 3 (see Figure 9)

1	**D:**	Eeehhhhh I don't think it's fair that I have to wait til I'm 16, okay?	213	→
2	**M:**	LAUGHS! 999. Sixteen to….	113	→
3	**D:**	Have a boyfriend.	213	→
4	**M:**	Well, you may not think it's fair. And, maybe it's not fair, but it's the way it is. Dad and I have our reasons and we	112	↑
5	**D:**	(I'm mature!)	242	↑
6	**M:**	You're not. You're not nearly as mature as you think you are. You're not ready to deal with everything that comes with having a boyfriend and dating.	112	↑
7	**D:**	I can be responsible.	212	↑
8	**M:**	Within the limits of your experience, yeah. But you're not old enough, you're not mature enough. Let us protect you for just a little bit longer, okay?	112	↑
9	**D:**	I'm not a little kid anymore.	212	↑
10	**M:**	No, you're not a little kid anymore. We understand that.	111	↓
11	**D:**	I'm growing up.	212	↑
12	**M:**	Do you know how many 14 year olds are pregnant and having babies?	122	↑
13	**D:**	[I don't want to know.]	232	↑
14	**M:**	But see, that's part of the problem because you don't want to know.	112	↑
15	**D:**	But it wouldn't be like that.	212	↑

	D	M	D	M	D	M	D	M	D	M	D	M	D	M	D	M	D	M
13																		•
12																	•	
11																•		
10															•			
9														•				
8													•					
7												•						
6									•		•							
5								•		•								
4							•											
3						•												
2					•													
1				•														
0	•	•	•															
-1																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

SPEECH TURNS

	D	M	D	M	D	M	D	M	D	M	D	M	D	M	D	M	D	M
28																		
27																		
26															•			
25													•	•		•	•	•
24												•						
23											•							
22										•								
21								•	•									
20							•											
19						•												
18					•													
17				•														
16			•															
15		•																
14	•																	
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36

SPEECH TURNS

Figure 9. Cumulative Graphic Display – Dyad #16

	D	M	D	M	D	M	D	M	D	M	D	M	D	M	D	M	D
29																	
28													•				
27											•	•		•			
26		•								•					•		
25	•		•						•							•	•
24				•		•		•									
23					•		•										
22																	
	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53

SPEECH TURNS

Figure 9 (continued). Cumulative Graphic Display – Dyad #16

16	**M:**	I know that you don't plan to, but, I don't think any of those 14 year old girls that are pregnant planned on getting pregnant. Well, maybe a few, but, for the most part, they don't plan on getting pregnant. They probably didn't even plan on having sex.	112	↑
17	**D:**	I'm not planning to…	212	↑
18	**M:**	[Sometimes things get out of control. Okay?]	132	↑
19	**D:**	I'm not planning to…	212	↑
20	**M:**	Gretchen, sometimes things get out of control and you end up doing things you have no intention of doing. I'm not saying that's going to happen, but, right now you need to learn to like yourself, you need to learn to like, to be who, you need to figure	115	↑
21	**D:**	But I know all that and I do like myself.	212	↑
22	**M:**	And, when you're 16 you can have a boyfriend. Until then you can't.	112	↑
23	**D:**	But he's moving!!! *whiny voice*	212	↑
24	**M:**	But it's not my fault. I can't help that, I can't do anything about that.	112	↑
25	**D:**	(He's moving!) *whining*	242	↑
26	**M:**	And he might not.	112	↑
27	**D:**	I hope not.	213	→
28	**M:**	There's always the chance he's not going to move and you can't let things like "he's moving" push you into doing things that you're not ready to do.	115	↑
29	**D:**	But I am ready.	212	↑
30	**M:**	I know you think that you're ready to have a boyfriend, but. 000. You don't get to have one.	112	↑
31	**D:**	You're not nice. *matter of factly*	212	↑
32	**M:**	LAUGHS –999 *caught off guard by daughter's response.* I'm not nice?	123	→
33	**D:**	That's not nice and if that's not nice you shouldn't do it. *as if reciting*	215	↑
34	**M:**	LAUGHS – 999	111	↓
35	**D:**	[Words of wisdom from my cousin.]	233	→
36	**M:**	Words of a wise two-year-old, huh?	113	→
37	**D:**	Uh huh! *In a high-pitched playful voice, imitating two-year-old.*	211	↓

38	**M:**	Well, unfortunately, as parents, we sometimes have to do things that aren't very nice, or that don't seem very nice at the time. But, you have to remember that we're looking out for your best interests and we're trying to protect you.	115	↑
39	**D:**	I know.	211	↓
40	**M:**	Okay?	121	↓
41	**D:**	Okay.	211	↓
42	**M:**	And you told me you agree, you saw why, you saw our reasoning.	112	↑
43	**D:**	Yeah.	211	↓
44	**M:**	You thought, you said the other day, you said that we had good reasons.	112	↑
45	**D:**	I don't agree with you guys.	212	↑
46	**M:**	You don't agree with our conclusion, that you can't have a boyfriend, but, you did agree that we had valid reasons.	112	↑
47	**D:**	Even though I still don't agree with them.	212	↑
48	**M:**	That you don't agree with our decision to not let you have a boyfriend?	123	→
49	**D:**	Mm hmm.	214	↑
50	**M:**	I know. Like I said, it's not easy for us to say, to tell you no for something like that. For something that's obviously this important to you. But... It's for the best. And we're trying to protect you. And sometimes we have to protect you from yourself.	111	↓
51	**D:**	Okay.	211	↓
52	**M:**	I love you.	111	↓
53	**D:**	*Looks playfully pouty, snickers a little. 000.*	260	→

Without compromising her stance, this mother preserved a positive relational tone by empathizing with her daughter's disappointment (Line 10, 16, and 50), expressing affection (Line 52), explaining her reasoning (Lines 6, 8, 12, 16, and 20), and expressing her concern over keeping her daughter safe and protected (Line 8, 38, and 50). Together, these behaviors appeared to contribute to the daughter's eventual acceptance of her mother's will. Ultimately, it is the daughter in this scenario who derails the escalating

symmetry by granting her mother a one-down token of deference, even if not agreement (Lines 41, 51). It is also the daughter who employs a repair attempt in which she quotes the childish rebuttal of her two-year-old cousin "That's not nice," in effect signaling to her mother that while she does not like her decision, she would rather preserve the relationship by joking about it than hurt the relationship by continuing to argue. The mother reciprocates that sentiment by accepting the repair attempt with a laugh, allowing her daughter to disagree, and expressing her love and concern.

Two other conflict-defusing characteristics that proved effective in higher SCS pairs were the offsetting of relational tension with humor, and depersonalizing the impact of disagreements. When asked to talk about something they do not see eye to eye on, the mother and daughter in the higher SCS dyad below (Dyad #21) immediately exchanged an amused glance that evolved into shared laughter that continued throughout the discussion and prevented any complaint from being taken too seriously or escalating into destructive competitive symmetry.

Dyad #21, Topic 3 (see Figure 10)

1	**M:**	*Laughing – 999.* You seem to have a whole list full here… I'm trying to think of one!	119	↑
2	**D:**	[I just have one, one that's pretty major.]	233	→
3	**M:**	What? I don't let you drive enough.	123	→
4	**D:**	Okay, well that one. Also… I'm FREEZING! *Laughing – 999.* Just turn on the heater!	216	↑
5	**M:**	*Laughs – 999*	161	↓
6	**D:**	That's all I ask of you. *melodramatically*	213	→
7	**M:**	[I'm too hot! I'm too hot!]	132	↑
8	**D:**	(And I'm freezing!) *serious yet playful*	242	↑
9	**M:**	And I'm the boss!	112	↑
10	**D:**	(I'm freezing!)	242	↑
11	**M:**	*Laughing – 999.* Get that blanket.	116	↑
12	**D:**	[We have to compromise.]	236	↑

	D	M	D	M	D	M	D	M	D	M	D	M
7												•
6											•	
5										•		
4									•			
3								•				
2				•			•					
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	1	2	3	4	5	6	7	8	9	10	11	12

SPEECH TURNS

Figure 10. Cumulative Graphic Display – Dyad #21

This dyad's playfulness and positive tenor continued throughout their conversation as can be seen a few moments later (still Topic 3) in a more serious attempt to discuss a disagreement. The pair's willingness to minimize their differences by laughing at mutual irritations highlights a disposition common among many higher SCS relationships, in which disagreements do not appear to be interpreted as personal rejection.

(see Figure 11)

13	**M:**	…What else do we disagree on? I don't let you drive enough. A lot of times it's because when I come to get you I'm in my pajamas.	113	→
14	**D:**	(No.) *challenging but smiling*	242	↑
15	**M:**	I don't want to get out and walk around.	112	↑
16	**D:**	[You barely are ever in your pajamas.]	232	↑
17	**M:**	Sometimes.	112	↑
18	**D:**	(maybe a couple of times.)	241	↓
19	**M:**	Sometimes I am.	112	↑
20	**D:**	But honestly, sometimes when I go to the car, and I know I'm gonna ask you, I say, "Can I drive?" and I mouth to myself, "No," cuz I know that's what you're gonna say.	212	↑
21	**M:**	*Laughs – 999*	161	↓

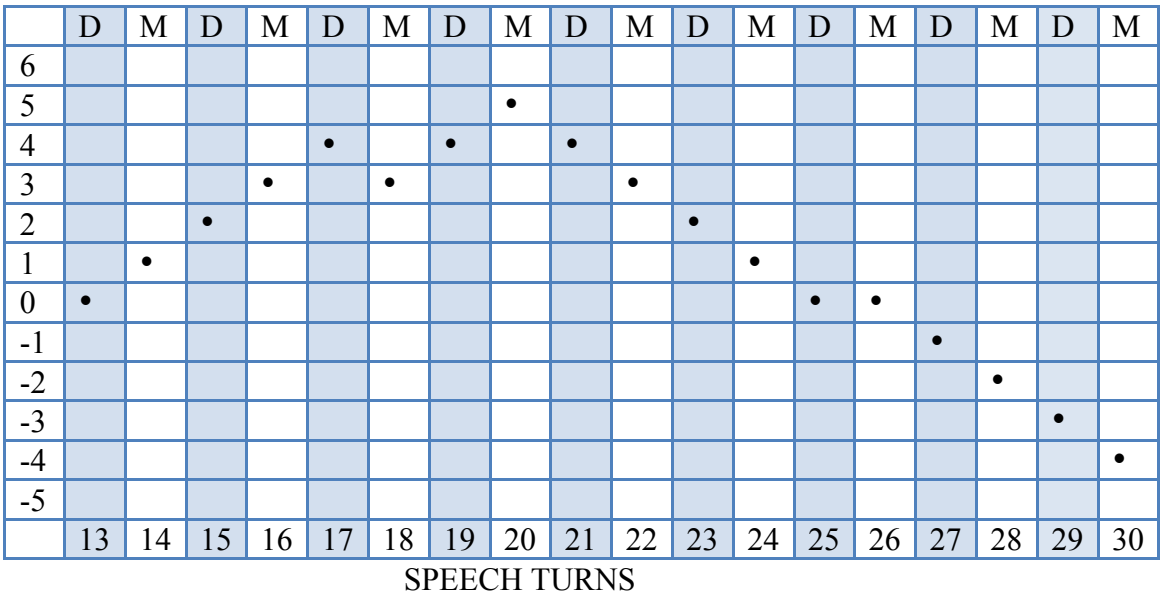

Figure 11. Cumulative Graphic Display – Dyad #21

22	**D:**	*Laughs – 999* So…	261	↓
23	**M:**	[You know what, we'll do better when you can just drive by yourself.]	131	↓
24	**D:**	I know.	211	↓
25	**M:**	We'll do better.	111	↓
26	**D:**	5 days!	213	→
27	**M:**	Yes! Yes, that will be good.	111	↓
28	**D:**	Yeah.	211	↓
29	**M:**	That will be good. Then we won't argue about that cuz I won't have to see it.	111	↓
30	**D:**	Yup, I'm gonna be a crazy, wreckless driver, and ha ha ha…	211	↓

A constructive conflict management characteristic common in higher SCS dyads but uniquely evident in a handful of lower dyads as well was that of collaboration in resolving disagreements. The below example taken from a lower dyad (#18) stands out as a particularly competent negotiation as mother and daughter productively collaborate on a better way to communicate about the daughter's responsibilities at home.

Dyad #18, Topic 4 (see Figure 12)

1	**M:**	So what can I do differently to enable you to understand that?	121	↓
2	**D:**	Umm, just like coming up, I don't know how to say this, like coming to me with a situation instead of saying, "Allie, do this and do this," and like I know, we'll be in the car together and you're like, "Kay, Allie, when we get home, I need you to do this and this and this, and this and this, tomorrow you're going to do this," and I just get really overwhelmed, like, "Wow, like, why can't I just, you know, take it, you know, slowly." But, I think it's like you said, just tell me the lesson I'll learn and why I need to do it and just kind of rephrase it so that I don't feel like it's a command	214	↑
3	**M:**	(okay)	141	↓
4	**D:**	And like you're demanding. So, just… yeah.	213	→
5	**M:**	Kay, I'll do that. And then, in turn, if you could say, "Oh yeah!" *dramatizing an excited voice*	111	↓
6	**D:**	"I'd love to!" *playing along*	211	↓
7	**M:**	"Now I get it!" *playing along*	111	↓
8	**D:**	*Laughs – 999*	261	↓
9	**M:**	*Laughs – 999* Does that sound good?	121	↓
10	**D:**	Yeah.	211	↓
11	**M:**	Okay, we'll both come a little bit closer to the middle.	111	↓

	D	M	D	M	D	M	D	M	D	M	D
1											
0		•									
-1	•		•	•							
-2					•						
-3						•					
-4							•				
-5								•			
-6									•		
-7										•	
-8											•
	1	2	3	4	5	6	7	8	9	10	11

SPEECH TURNS

Figure 12. Cumulative Graphic Display – Dyad #18

Just as some lower SCS dyads exhibited certain effective interaction patterns so did higher SCS dyads find themselves in an occasional degenerative pattern, the difference being that in most cases, higher SCS pairs eventually maneuvered themselves away from the potentially destructive episode toward a more positive outcome. The following two excerpts from the same higher SCS pair illustrate a conflict episode that initially escalates to intense competition with no resolution, but is revisited using a more productive approach. In the first segment below from higher SCS dyad #15, a discussion of the daughter's cleanliness quickly escalated from non-threatening to uninhibited competitive symmetry.

Dyad #15, Topic 3 (see Figure 13)

1	**M:**	Okay, so, how do you feel about keeping your room clean?	123	→
2	**D:**	Okay, well, understand that I don't have time sometimes.	212	↑

3	**M:**	I understand.	111b	↓
4	**D:**	And then I just don't have time to clean it, cause I'm tired and I have to go to bed. Like tonight I'm going to go to bed at 7, just kidding. *laughs* 999	213	→
5	**M:**	*not laughing* So you think that you should be able to keep it however you want?	122	↑
6	**D:**	Well, we saw how that worked with Kelsey. *laughing* 999	213	→
7	**M:**	*not laughing.* Yeah, that didn't work. Um.. Is that what you think? You think that you should be able to keep it how ever you want	122	↑
8	**D:**	(well yeah, well)	242	↑
9	**M:**	and I shouldn't bug you about it.	112	↑
10	**D:**	Honestly, I keep it pretty clean, like cause, I, I have to have my room clean, it starts bothering me. Sometimes I just don't have time to clean it. *silence* 000	212	↑
11	**M:**	Well, but well, I understand that you're busy, but what do you think? Do you think you should be allowed to keep it however you want or do you think that	122	↑
12	**D:**	[Well, within reason. I've done a lot better, it's just this past month.]	232	↑
13	**M:**	It's been longer than a month.	112	↑
14	**D:**	Nuh uh.	212	↑
15	**M:**	Yes, yes	112	↑
16	**D:**	(Mom, it's been a month.)	242	↑
17	**M:**	yes, absolutely. Three,	112	↑
18	**D:**	(no)	242	↑
19	**M:**	Four.	112	↑
20	**D:**	[No! Nuh uh… it was way good.]	232	↑
21	**M:**	It was clean while you were in surgery. *Sarcastic*	112	↑
22	**D:**	*laughs* 999 - Well, duh, I wasn't in it.	212	↑
23	**M:**	*sigh*s I don't know, um, I mean usually it's not a problem because you're a fairly, you're cleaner than other people in the house, but yet, it just seems like lately it's just, been really bad, and I get really tired of it because I don't like to sit and, I don't want to sit and nag and I don't want	112	↑

	M	D	M	D	M	D	M	D	M	D	M	D	M	D	M	D	M	D
13																		•
12																	•	
11																•		
10															•			
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5										•								
4									•									
3								•										
2							•											
1		•			•	•												
0	•		•	•														
-1																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

SPEECH TURNS

	M	D	M	D	M	D	M	D	M	D	M	D	M	D	M	•D	M	D	M
32																			•
31																		•	
30																	•		
29																•			
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14	•																		
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37

SPEECH TURNS

Figure 13. Cumulative Graphic Display – Dyad #15

24	**D:**	[Well no one even SEES my room! It's like off in the end.]	212	↑
25	**M:**	[Um, it doesn't matter.]	112	↑
26	**D:**	Well, you, you can't even see it	212	↑
27	**M:**	[Okay, but don't you think it's important that you should learn to pick up after yourself and to clean up?] *challenging*	122	↑
28	**D:**	My house is going to be way clean when I have a house.	212	↑
29	**M:**	[Well then prove it.]	116	↑
30	**D:**	Okay, look at this room! 999	216	↑
31	**M:**	[And you know what else? It's not just your bedroom, it is, leaving stuff out all over the house.]	112	↑
32	**D:**	[Well that's because I'm up until 2 writing a paper and I have to get up and study so I just leave my stuff out instead of having to put it away and get it out in four hours.]	212	↑
33	**M:**	[Well it's not just, it's just, it's not just from 10 o'clock at night til 2 in the morning, it is, all the time. *tsk]*	112	↑
34	**D:**	Nu uhh, what else am I leaving out?	222	↑
35	**M:**	Shoes, and coats and backpacks and books and, and it just makes everything so messy.	112	↑
36	**D:**	I don't leave like my backpack out.	212	↑
37	**M:**	Yeah you do.	112	↑

While the discussion begins innocuously, by the mother's third utterance in Line 5, she has rejected her daughter's attempt to keep the conversation light-hearted, and has initiated a string of nonsupportive questions ("Is that what you think? You think that you should be able to keep it however you want… and I shouldn't bug you about it?" Lines 5-11) that trigger an ongoing chain of criticism and defensiveness. Halfway through the exchange (Line 23) the mother softens her response somewhat, crediting her daughter for being more tidy than others in the family, but returns to emphasizing her irritation in dealing with her daughter's messiness. This refuels the daughter's defensiveness ("..no

one even SEES my room!" Line 24) which triggers an extension of her mother's criticism from a messy bedroom to her daughter's leaving her stuff throughout the house (Lines 31-35). Attempting to defend herself through justification ("… because I'm up til 2 writing a paper" Line 32) and denial ("I don't leave like my backpack out" Line 36), fail to gain the daughter ground as her mother refuses to back down on her criticism (Line 37). Following her mother's final rebuttal, the daughter abruptly reroutes the conversation to a stain on her pants.

While not a yelling match, the relational tone throughout the interaction is tense and adversarial, creating in an escalating spiral of competitive symmetry infused with negativity and lacking resolution. Later in the conversation, however, the mother returns to the topic once again, but this time couching the subject within a submissive symmetrical pattern of compliments and praise that elicits a drastically different response from the daughter and culminates the discussion on a positive note.

Dyad #15, Topic 3 (see Figure 14)

1	**M:**	We agree on most everything though, cause you're a really good girl.	111	↓
2	**D:**	(Thank you.)	241	↓
3	**M:**	You come in when you're supposed to, and you, you're a careful driver, and you, do everything really good.	111	↓
4	**D:**	Thank you.	211	↓
5	**M:**	Right? Except for keep your room clean.	112	↑
6	**D:**	*chuckles* 999. I'll try.	211	↓
7	**M:**	And that's not too bad. You're not even that bad at that.	111	↓
8	**D:**	Yeah, you didn't put caution tape up like you did for Kelsey. That was so funny.	211	↓

	D	M	D	M	D	M	D	M	D
1									
0									
-1	•								
-2		•							
-3			•						
-4				•					
-5					•				
-6						•			
-7							•		
-8								•	
	1	2	3	4	5	6	7	8	9

SPEECH TURNS

Figure 14. Cumulative Graphic Display – Dyad #15

Prefaced this time by her mother's confirming approval, the daughter accepts her mother's complaint with a one-down concession in the form of a chuckle and a willingness to try harder (Line 6). This prompts a one-down response from the mother who, contrary to her previously critical stance, now minimizes the grievance (Line 7) and the exchange ends positively recalling a family joke (Line 8). Framing the same previously charged issue within a confirming exchange affected a more functional outcome and personal connection between mother and daughter, illustrating a compelling contrast between more and less effective strategies of addressing disagreements.

Mother One-up/Daughter One-down Transact Pattern

in Higher SCS Relationships

As the most robust differentiator between higher and lower SCS groups, the mother one-up/daughter one-down (M↑D↓) transact points to a greater willingness on the part of higher SCS daughters to respond to their mothers' one-up messages with a one-down

response, as opposed to lower daughters' propensity to respond with a one-up or one-across message. One-up assertions may express an instruction or order, correct another, disagree, or issue a challenge, and responding to such with a one-down message can convey humility, submissiveness, cooperativeness, or respect towards the giver of the message, or may represent a placating response. Among higher SCS pairs, mother one-up/daughter one-down (M↑D↓) transacts tended to represent a relationship-affirming exchange of mutually respectful assertion and deference. In the first example, Dyad #21 is discussing an area of disagreement within their relationship:

Dyad #21, Topic 3 (see Figure 15)

1	**M:**	Okay, um, what else..... Do you know what else I could *really* get mad at if I wanted to? *serious but not angry*	123	→
2	**D:**	What?	223	→
3	**M:**	Your bedroom! *exclaims dramatically*	114	↑
4	**D:**	Oh I know. I'M mad at my bedroom!	211	↓
5	**M:**	And, uh - *smacks her playfully on the knee*	153	→
6	**D:**	[But you put all that stuff in there.]	232	↑
7	**M:**	I know, but still! I don't, I hardly ever get mad at your bedroom.	112	↑
8	**D:**	I know, I know *freely conceding*	211	↓

	M	D	M	D	M	D	M	D
2							•	
1			•			•		•
0	•	•		•	•			
-1								
	1	2	3	4	5	6	7	8

SPEECH TURNS

Figure 15. Cumulative Graphic Display – Dyad #21

Mother and daughter each contribute to what "goes right" in this exchange. Given the crux of what delineates higher SCS from lower SCS relationships is a daughter's one-down response to her mother's assertion, this daughter's willingness to validate her mother's complaint ("Oh I know" Line 4 and 8), and not take her mother's grievance personally ("I'M mad at my bedroom!" Line 4) prevents the issue from gaining negative momentum and relieves the mother from a need to belabor the point. The mother's soft start-up (Gottman, 1994) also serves the interaction well by conveying that while the issue is valid enough to justify her anger she is choosing not to let it affect the relationship. Her choice to phrase her complaint as something she "could really get mad at" if she wanted (Line 1), coupled with her good-humored tone echoes the sentiment that while still an irritation, she values their relationship above the cleanliness of the room. Consequently, her complaint sounds less like an attack and comes across less face-threatening to her daughter. The immediate de-escalation of the issue after one or two one-ups confirms the effectiveness of their approach. Later in the conversation the pair successfully negotiated a plan in which the mother agreed to help the daughter de-junk her room.

In the next example from higher SCS dyad #6, it is the daughter's use of humor that keeps the tenor of the exchange positive following an interruption in the form of a one-up correction from her mother that could have sparked a defensive response from the daughter but did not.

Dyad #6, Topic 2 (see Figure 16)

1	**M:**	Who are you having issues with, that you haven't told me about?	123	→

	M	D	M	D	M	D	M	D
1								
0	•				•			
-1		•	•	•		•		
-2							•	
-3								•
-4								
	1	2	3	4	5	6	7	8

SPEECH TURNS

Figure 16. Cumulative Graphic Display – Dyad #6

2	**D:**	Ohh, ohhh, This is just like dreary, depress my life one. Like, I just made myself feel bad, you know?	211	↓
3	**M:**	Mm hmm.	113	→
4	**D:**	I was talking, actually, me and Zoe are feeling the exact same way.	213	→
5	**M:**	(Zoe and I.) *correcting her grammar*	145	↑
6	**D:**	Zoe and I. *correcting* Make me feel better! Make more issues on top of this. *Joking dramatically, pretending to be offended*	211	↓
7	**M:**	Sorry, sorry, sorry. *laughs* - 999	111	↓
8	**D:**	*laughs* - 999	111	↓

While parents imposing small corrections such as this one are commonplace, a positive reaction from the daughter is not always common. In their conversation overall, this mother and daughter displayed patterns of open disclosure, showed interest in each other's opinions and experiences, and laughed frequently. Within this atmosphere of support, the mother's one-up interjection was met not with irritation or dismissal, as was the case in many lower SCS couples, but was accepted in good humor. For her part, the mother's readiness to share in the joke and swiftly apologize was a reciprocal show of support that helped her daughter save face after being corrected.

Another quality contributing to higher daughters' likeliness of responding to their mothers' one-ups with a one-down is a willingness in both partners—and particularly daughters—to listen and remain open to being influenced by the other's perspective or advice. In the following dyad (#11), the daughter listens as her mother expresses concern over the daughter's boyfriend's criminal behavior.

Dyad #11, Topic 3 (see Figure 17)

1	**M:**	So, your, the way you present him unwittingly comes off in a bad light. Umm, and I, just put yourself in my shoes. If, uh, even if as an adult, if I came home and said, "Oh my gosh, my friend Jessica totally got arrested, or got stopped at Smith's cuz she was stealing!", wouldn't you ask me what the heck I was doing with a friend like that?	122	↑
2	**D:**	No!.... Maybe. *reconsidering* But, like, you weren't with her, so, like, at the time	212	↑
3	**M:**	(No!) *rejecting her reasoning*	142	↑
4	**D:**	So…	263	→
5	**M:**	But, every time I went somewhere with her, wouldn't you be worried about me… just a little bit?	122	↑
6	**D:**	Yeah. Yeah, that's true. *sincerely*	211	↓

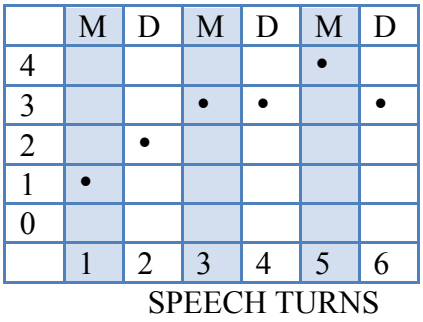

Figure 17. Cumulative Graphic Display – Dyad #11

Despite her intent to defend her boyfriend and gain her mother's approval, this daughter remains open to her mother's concerns and allows herself to be persuaded by her reasoning. Beginning in line 2, the daughter retracts her rebuff and by line 6 concedes that her mother has a legitimate point. As the conversation progresses, the daughter remains firm in her commitment to dating her boyfriend, but validates her mother's concerns and accepts her recommendations as useful in helping her "date smarter."

Mother One-up/Daughter One-down Transact Pattern in Lower SCS Relationships

Transcripts of lower pairs were also examined for the mother one-up/daughter one-down (M↑D↓) transact but because of its relative infrequency, examples were less common. What became noticeable, however, were conversational junctures in which this transact could have been enacted to the benefit of lower SCS relationships but was not. These instances mostly consisted of transacts in which mothers expressed a one-up assertion that might have as easily been answered with a one-down response but were instead countered with one-up defensiveness or attack. In the first example from Dyad #22, the mother is attempting to help her daughter find a more effective way to communicate with a difficult friend, to which the daughter responds with unapologetic rejection.

Dyad #22, Topic 2 (see Figure 18)

1	**M:**	Have you ever gone to her and said "Hey, Laurel, what's up with your different moods?"	123	→
2	**D:**	No.	214	↑
3	**M:**	Do you think you should?	125	↑
4	**D:**	No. *rolls eyes*	212	↑
5	**M:**	Why?	122	↑
6	**D:**	Because *gives Mom a "you're crazy" look*	212	↑

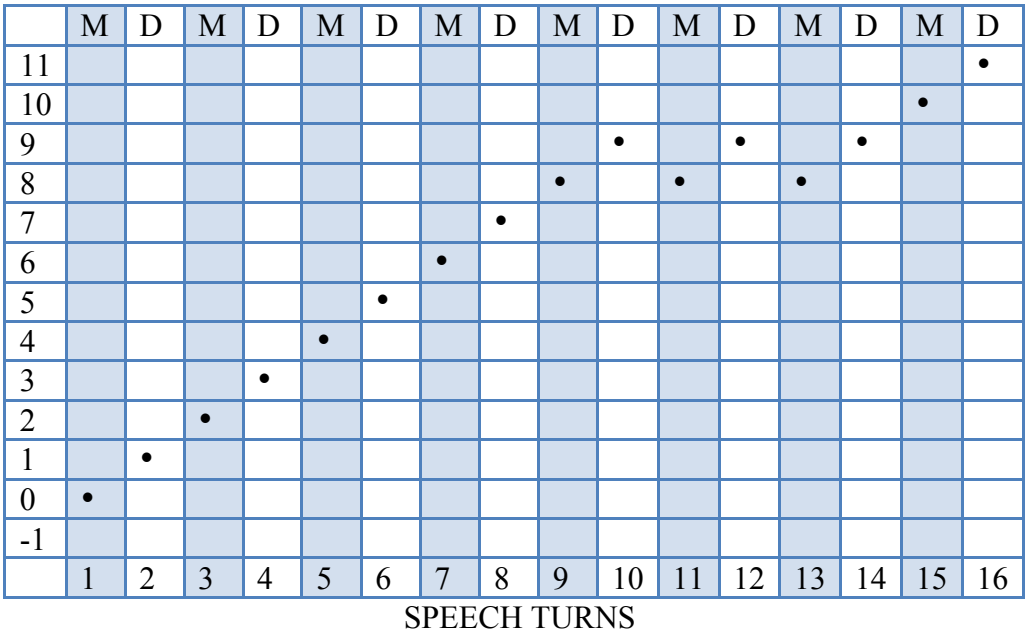

Figure 18. Cumulative Graphic Display – Dyad #22

7	**M:**	No, I'm serious. Cause maybe	112 ↑
8	**D:**	[It'd be awkward and end our relationship.] *curtly*	232 ↑
9	**M:**	It would help in the long run though because	112 ↑
10	**D:**	[No because I'm not even going to be with her next year so it doesn't even matter.]	232 ↑
11	**M:**	Yeah, but it might bring you closer, do you think?	121 ↓
12	**D:**	No. *rolls eyes* I don't.	212 ↑
13	**M:**	[Well maybe she doesn't realize that she's treating you that way and that might help her, don't you think?]	131 ↓
14	**D:**	No.	212 ↑
15	**M:**	Really?	122 ↑
16	**D:**	*daughter shakes head "no"*	202 ↑

Notwithstanding the mother's one-up messages are not particularly commanding or critical, her daughter remains impervious and annoyed at her mother's attempts to help.

At several junctures the daughter responds with a visibly irritated one-up "No", that could have as functionally been expressed as a more conciliatory one-down response such as "Maybe," "That might help," or "I'll think about it." Instead, the daughter remains unwilling to be influenced by her mother and makes it clear that her efforts are unappreciated.

Some lower SCS daughters appeared wholly unwilling to accept their mother's influence or concede to acknowledging value in their mother's perspective or position. As in the excerpt that follows, the mother attempts to praise what is going well in the relationship and implicates herself as part of what doesn't work well, but is met with antagonism from her daughter.

Dyad #27, Topic 3 (see Figure 19)

1	**M:**	Well I think that is something we can both work on… making sure we're talking to each other respectfully because our relationship is getting, I think it's getting a lot better. I think that we have, I mean, we've had a lot of fun at different times lately, you know, we've had a lot of times, I've seen you smile more, and had some fun conversations, usually based on being silly, but that's okay, that's a start. But, I think in our home as a whole we need to be careful about being sarcastic.	115	↑
2	**D:**	Well that's the only way I know how to talk.	212	↑
3	**M:**	It's not Alexandra. And I think, because you're a very… even your teachers in elementary school would talk to me about how witty you are and how… and wit is smart humor.	112	↑
4	**D:**	(sarcasm!) *sassy*	242	↑
5	**M:**	No, it's not! It's	112	↑
6	**D:**	[Satire.]	232	↑
7	**M:**	It is smart humor. You're using smarts to be funny. Not sarcasm. Sarcasm is always, always negative. Or putting somebody else down. It's making fun of somebody else. Always! *passionately*	112	↑

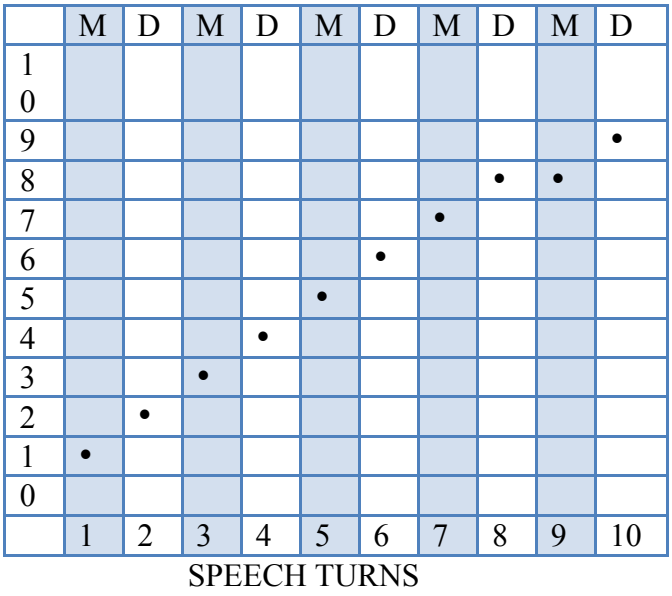

Figure 19. Cumulative Graphic Display – Dyad #27

8	**D:**	Well, defiantly	212	↑
9	**M:**	[If it's sarcastic, that is.]	133	→
10	**D:**	You have four fingers pointing back at you, my friend! Accusingly	212	↑

Immediately noticeable in the above exchange is how rapidly the mother's softened approach toward the issue (Line 1) gets increasingly harsher with each turn of opposition from her daughter (Lines 3, 5, 7, and 9). Also evident are numerous instances in which the daughter could have opted for a less hostile reaction, replacing defensive and attacking remarks such as "Well that's the only way I know how to talk" (Line 2) and "You have four fingers pointing back at you, my friend!" (Line 10) with more agreeable comebacks such as "Yeah, you're probably right" or "Okay, we can all work on that," but did not.

The problematic nature of the mother one-down/daughter one-up transact does not lie in daughters' domineering responses alone, inasmuch as daughters in both SCS groups were more domineering than their mothers. Nor is a daughter's expressing autonomy through a differing opinion necessarily relationally detrimental. More likely, the answer lies in daughters' perpetual and obstinate resistance to offering an occasional conciliatory response, whether out of genuine agreement or respectful deference.

What contributes to daughters' reluctance to grant their mothers an occasional one-down concession is likely a combination of factors. The degree of emotional openness and relational closeness influences partners' willingness to be cooperative and mutually deferential. As well, normative adolescent development suggests autonomy and differentiation from one's parents is to be expected. Physical and developmental factors, family and peer influence, and everyday adolescent stressors may all play a part in daughters' propensity to be more or less disagreeable. While an extensive evaluation of motivating factors for behavior is outside the scope of this study, an examination of higher and lower SCS dyads illuminated two communicative factors verbalized by daughters that partially explain the predominance of the mother one-down/daughter one-up pattern among lower SCS dyads in this dataset. First, unwillingness of some daughters to offer a submissive response to their mother's assertion is influenced by the interpretation of their mothers' support messages as disingenuous. Additionally, daughters' sense of being unreasonably constrained and restricted by their mothers has an inhibiting effect on their desire to respond with deference.

The following interaction from lower SCS dyad #22 vividly portrays a problematic pattern present in a relationship in which both of the above are in effect.

Dyad #22, Topic 3 (see Figure 20)

1	**M:**	It's what you thought? Are you angry about it? I mean, can you kind of put yourself in my shoes?	121	↓
2	**D:**	Yeah, but not really, because you're you and I'm me. Like, perspectives are nice to have if they're not forceful, and they're just, stating an opinion, because sometimes I feel like you're just making me do something that I don't think that I would really do, and yeah. I don't know.	212	↑
3	**M:**	Yeah. I mean I understand what you're saying	111	↓
4	**D:**	[But you're not me, so you don't know what I'm thinking either.]	232	↑
5	**M:**	Yeah, so you just, you think that I'm too forceful with my ideas. Is that what you're saying?	121	↓
6	**D:**	*Nods head "yes"*	212	↑
7	**M:**	So you don't want to hear them?	123	→
8	**D:**	No, I want to hear them, I just don't want to be, persuaded into them.	212	↑
9	**M:**	That's fair. *Nodding*	111	↓
10	**D:**	*Nods "yes", mirroring mother*	211	↓
11	**M:**	That's okay. *Sounds slightly hurt/defensive.* I don't want to persuade you into them either.	111	↓
12	**D:**	But you do. *sober and firm*	212	↑
13	**M:**	Sometimes.	112	↑
14	**D:**	All the time. *firmly*	212	↑
15	**M:**	Sorry.	111	↓
16	**D:**	It's okay.	211	↓
17	**M:**	But generally not cuz you usually do your own thing anyway. *chuckling*	112	↑
18	**D:**	Yeah, I'm defiant because I have to be. *serious*	212	↑
19	**M:**	Really?	123	→
20	**D:**	Yeah.	214	↑
21	**M:**	Well, you don't really have to be.	112	↑
22	**D:**	To get my own way I do.	212	↑
23	**M:**	Well you don't have to be defiant. I don't look at it as defiant. I think you're just you and you want to be yourself and it's good.	112	↑
24	**D:**	I don't want to talk about this anymore. *looking tired and skeptical*	212	↑
25	**M:**	You're done?	123	→
26	**D:**	Yeah. I'm getting impatient.	212	↑
27	**M:**	You are?	123	→

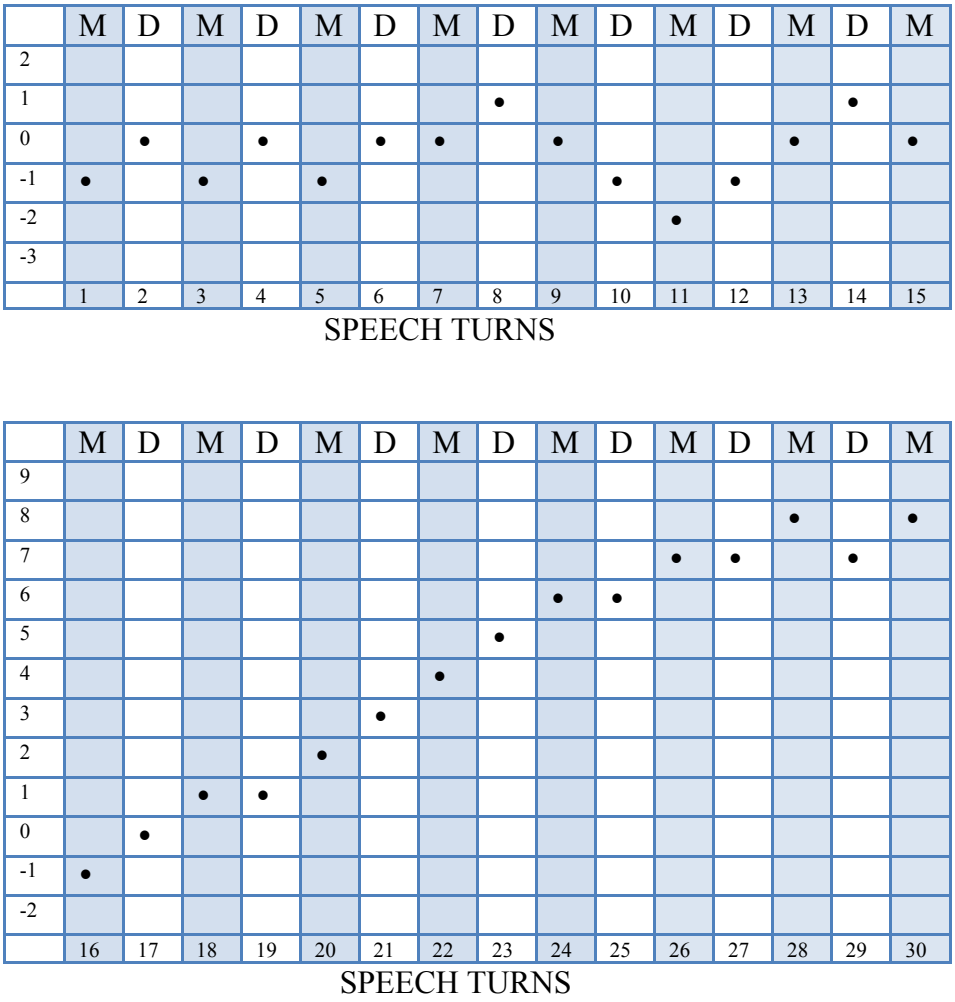

Figure 20. Cumulative Graphic Display – Dyad #22

28	**D:**	Yeah. *irritated*	212	↑
29	**M:**	Why? I think you have good ideas honey. *tentatively* I mean, you do. I think you, think you know what you like and that's good. You go for it. I think you'd be surprised at how, um… backing of you I really am. I, I just like to, like to question things so that we see all the options and, that's all. You know, the outcome isn't as important as just doing your homework… to me. Cuz I think if you're happy, I'm happy. I am just totally concerned about you because I love you, and I just INDISTINGUISHABLE… *patronizing tone*	111	↓
30	**D:**	*Silence - 000*	262	

The daughter's skepticism toward her mother's support offerings is readily apparent. What appeared to be validating affirmations in content ("…you want to be yourself and it's good" Line 23) and ("…you have good ideas"… "you know what you like and that's good"…"I am just totally concerned about you because I love you" Line 29) are not received as such by this daughter whose wariness to accept her mother's support offerings as legitimate are observable in her rejecting responses ("But you do" Line 12; "I don't want to talk about this anymore" Line 23; and silent withdrawal, Line 30).

The degree of authenticity in the mother's support is difficult to qualify, except that her paralinguistic tone alternates between sounding sincere and sounding patronizing. Based on her daughter's decided skepticism, the mother's intended meaning is probably less consequential than her behaviors. After an apology by her mother for being too strong in her attempts to influence her daughter, the daughter offers a rare one-down acceptance; instead of building on the submissive exchange, however, the mother overrides her previous apology and accuses her daughter of doing what she wants anyway. It is in this retraction that the daughter's perception of her mother's contrition may be redefined as insincere, contributing to an increased wariness in trusting her mother's support. Indeed, it may be that disingenuous support, even if only perceived as such, may have the same relational effect as nonsupport.

Along with a distrust of support, overbearing constraint by mothers, or the perception of such, also contributed to daughters' disinclination to comply with mothers' assertions. This daughter's claim that to "get her way," or not be persuaded to think and behave like her mother, she must be defiant (Lines 18 and 22) bears out in the daughter's

disproportionate utterance of thirteen (out of fifteen) one-up messages in response to only four (out of fifteen) one-up statements from her mother (the mother's remaining turns being seven one-down and four one-across messages). The daughter's domineering and dominant control maneuvers are aligned with her perspective that to withstand her mother's overbearing influence – which, notably is not solely conveyed in one-up assertions – she must maintain a near-constant oppositional stance. Accordingly, it would seem that for some lower SCS daughters, relational success is determined more by their ability to establish their emotional or ideological separateness—usually via opposition or imperviousness to their mother's influence or opinion—than by closeness.

These contentions were not expressed in most higher SCS relationships where daughters appeared to deem closeness as a relational strength and judged their mothers' attempts to influence them as well-intentioned and less compulsory. The following dialogue from higher SCS Dyad #33 conveys this daughter's appreciation for her mother's encouragement of her autonomy and her willingness to trust her with decisions.

Dyad #33, Topic 4 (see Figure 21)

1	**D:**	[And you treat me like an adult which is huge, cuz like, I would go crazy if like, Leslie was my mom.]	211	↓
2	**M:**	Yeah.	111	↓
3	**D:**	Like I would, would be the rebellious child. Like if someone was always trying to control me and treat me like I was still six, I would definitely be different.	213	→
4	**M:**	Yeah.	111	↓
5	**D:**	But, I don't' know, you don't put that many limits on me, I don't know, you kind of expect me to know what to do, which is nice.	211	↓
6	**M:**	Well and you use good judgment so I figure I don't need to	111	↓
7	**D:**	(right)	240	→

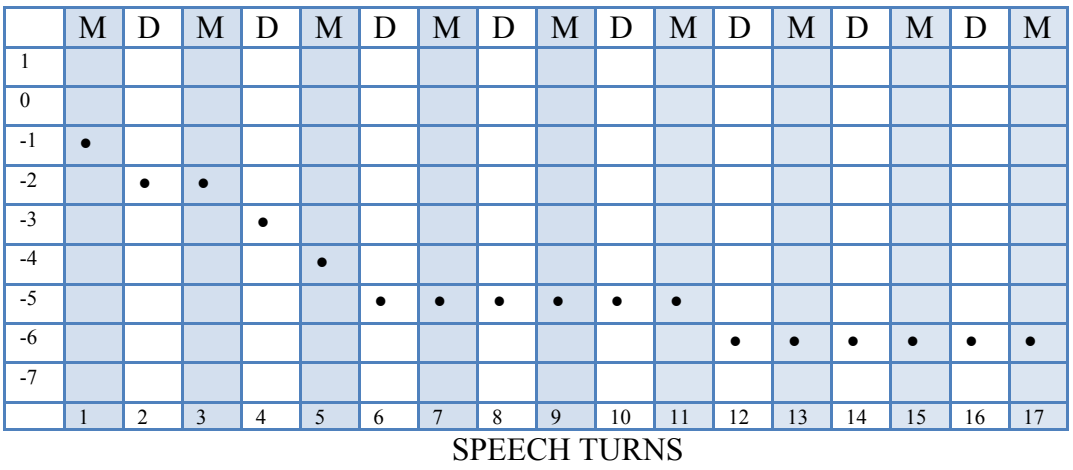

Figure 21. Cumulative Graphic Display – Dyad #33

8	**M:**	And you know the few times where maybe you make a mistake or use poor judgment – which I still do in my life	113	→
9	**D:**	(right)	240	→
10	**M:**	Like I said, the consequence happens, just because that's what happens, you know	113	→
11	**D:**	(yeah)	240	→
12	**M:**	But I think it's good, like when you asked me, you know, on Saturday, should I go on that date or not?	111	↓
13	**D:**	(mm hmm)	240	→
14	**M:**	You know, we can talk about it, but I figure you're the one that has to make those decisions. We can	113	→
15	**D:**	(yeah)	240	→
16	**M:**	talk about it but you've got to figure that out.	113	→
17	**D:**	Yeah.	213	→

While likely not the only contributing factor, this daughter primarily ascribes her cooperative nature as a response to her mother's non-controlling attitude in treating her "like an adult" (Line 1). To an extent, a daughter's age and maturity play a large part in

her mother's ability to encourage her independence, and given that this daughter is 18 years old, having greater autonomy is a reasonable expectation. The same standard would in many respects be inappropriate for younger daughters; nevertheless, the daughter in lower Dyad #22 is also 18 years old suggesting that age and developmental stage alone do not account for mothers' inclination to encourage daughter's autonomy and decision-making abilities.

Whereas the mother in the higher SCS dyad praised her daughter's good judgment and allowed her room to make mistakes (Dyad #33, Lines 6 and 8), the mother in the lower SCS dyad made clear her lack of confidence in her daughter's capacity to make good decisions (Dyad #22, Line 29). Both mothers express a desire to be involved in their daughters' decisions although the extent to which this is interpreted as support rather than as an expression of nonsupport appears to make all the difference in daughters' receptiveness. Hence, while upholding boundaries and expectations remains integral to successful mothering, so does affording age-appropriate autonomy and agency. Such a formula, enhanced by mothers' availability and support appears vital in cultivating a more cooperative and obliging disposition in daughters. Notwithstanding, the circularity of influence implicates both partners as co-creators of all patterned behavior, and therefore both capable of and responsible for meaningful change.

Summary of Research Question 3 Analysis

To address Research Question 3, a qualitative interaction approach was taken using a case comparison method (Fairhurst, 1993) to more closely examine significant behavioral patterns and change events identified through the RCCCS, GSEQ and content analysis. Four dominant patterns including submissive symmetrical patterns (↓↓↓),

competitive symmetrical patterns (↑↑↑), rigid complementarity (↓↑↓↑), and the mother one-up, daughter one-down (M↑D↓) transact, were elaborated on with an eye toward notable differences between higher and lower SCS dyads.

Submissive symmetry was distinctly noted among higher dyads as occurring not only more frequently but embodying a more supportive, caring, and understanding tone. Among most higher SCS dyads, one-down sequences warmly conveyed affection, gratitude, support, apology, and forgiveness, and appeared sincere in tone and intent. By contrast, one-down exchanges in many lower dyads were not as long-lasting and occasionally lacked warmth and sincerity in at least one partner. Given daughters' propensity for one-up responses, submissive patterns among lower dyads were often diverted to mother one-down/daughter one-up (M↓D↑) complementary patterns. More typical in lower SCS dyads, this form of rigid complementarity depicted lower daughters' resistance to agree with or support their mothers' assertions and instead issue challenging or rejecting statements.

Competitive symmetrical patterns (↑↑↑) and extended conflict patterns (↑↑↑↑↑↑) occurred in both SCS groups but more frequently among lower dyads. Qualitatively, conflict between groups differed notably in tone and tactics. Whereas lower dyads enacted more negative strategies of blame, criticism, negative attributions, failed repair attempts, uncooperativeness, nonsupport, and personalizing disagreements, higher SCS dyads were more validating, cooperative, good-humored, personally accountable, open to repair attempts, accepting of one another's influence, and objective about disagreements.

Finally, in examining higher SCS daughters' greater willingness to offer a one-down submission to their mothers' one-up assertions, the degree to which mothers expressed one-ups with humor or without harsh criticism combined with daughters' willingness to accept instruction or negative feedback with humor or deference contributed to the successful enactment of this pattern primarily among higher SCS dyads.

The final chapter will review and discuss key findings of this study and their implications for the mother-daughter relationship and the relational communication approach.

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[1] Per alpha inflation, MANOVAs were used to confirm overall model significance. As confirmation of the robustness of the MANOVAs, Kruskal-Wallis tests were also run in comparison to MANOVAs and in every case corroborated MANOVA results.

[2] Frequencies and Percentages for all Digit 3 Response Modes are presented in Appendix X. Support, nonsupport, and extension response modes were singled out for analysis because of their more prevalent occurrence and their relevance to the research question.

[3] I consulted Byron Davis, Staff Consultant for Statistics & Research Methodology at the Center for High Performance Computing at the University of Utah, and was advised that calculating frequencies-of-occurrence for complex patterns was appropriate given the large number of speaking turns in the dataset.

CHAPTER 5

SUMMARY AND DISCUSSION

From the relational communication perspective, little is known about relational control dynamics within the mother-adolescent daughter relationship. This study extended the application of relational control research to this relationship and expanded the methodological boundaries of previous research by overlapping the relational control coding method with qualitative interaction analysis. This mode of inquiry broadened the empirical lens afforded by each approach and enabled a closer investigation of the conditions and behaviors that make symmetrical, complementary, and leveling patterns more and less functional (see Rogers & Escudero, 2004).

Of particular interest in this study was an examination of predominant mother-daughter patterns and episodes, including control and support dynamics, conflict triggers and patterns, and repair attempts. In this chapter, implications of the main findings detailed in Chapter 4 will be discussed. Limitations of this study will also be addressed along with directions for future research.

Discussion and Implications of Relational Control

From a relational communication perspective, relational control is not something to be possessed, but a process measured by a change of behavior in response to the influence of the other (Millar & Rogers, 1987). Viewed through this lens, parent-

adolescent influence is appropriately considered in terms of its bidirectional influence rather than unidirectional effects of parenting on adolescents' behavior and satisfaction. Behavioral profiles of higher and lower satisfied mothers and daughters in this study were better understood by observing control dynamics and complex patterns of interaction.

Mothers are often presumed to take a domineering or dominant position in parent-child relationships, but in this dataset, adolescent daughters, especially lower SCS daughters, were more domineering and dominant than their mothers, while mothers were more submissive than daughters. Developmentally, daughters' domineeringness is consistent with the understanding of adolescence as a time of seeking increased independence, renegotiating identities, and challenging the roles their parents have set for them (Marcia, 1966; Erickson, 1966; see Steinberg, 2001; Zimmer-Gembeck & Collins, 2003 for reviews). As a whole, daughters in this dataset appeared comfortable exercising their psychological autonomy and did so through the expression of domineering statements ranging from changing the topic, making suggestions, and expressing strong disagreement.

Domineeringness was not only more prevalent among lower SCS daughters than higher, but lower SCS daughters' domineeringness generally took on a more negative tone. The inverse relationship between domineeringness and satisfaction is not unlike previous findings in which domineeringness in one spouse, namely the wife, was associated with lower marital satisfaction (Courtright, et al., 1979; Escudero, et al., 1992; Escudero, et al., 1997; Rogers & Escudero, 2004; Rogers-Millar & Millar, 1979).

Inasmuch as daughters in both SCS groups were more domineering than their mothers, other influences on satisfaction must be considered as well.

Discussion and Implications of Relational Support, Nonsupport,and Extensions

Variations in supportive communication contributed to more and less optimal outcomes between SCS groups. Overall, lower SCS pairs offered less outward support and more explicit nonsupport, while higher dyads offered more support and expressed it in ways that seemed to have more "heart" behind the message. Expressions of interest and concern, compliments, and willingness to change for and cooperate with the other were common. Evidence of all five of Cutrona and Suhr's (1994) support types including emotional support, esteem support, network support, informational support, and tangible support emerged in higher dyads' conversations. For the most part, these recurring affirmations were woven effortlessly into conversations, conveying sensitivity to each other's feelings, and demonstrating an earnest desire to help each other (see Satir, 1972; Sillars, et al., 2005).

Akin to Vangelisti's (2009) notion of preventative support, the relationship building effects of frequent and successful support exchanges among higher SCS interactions conceivably aided in these pairs' ability to overlook smaller infractions and emphasize relational bonds, as well as promote openness and understanding (Burleson & Samter, 1985)—all of which appeared to contribute to feeling confirmed, relationally close, and confident in expressing opinions (Sillars, et al., 2005; Satir, 1972; Noller & Fitzpatrick, 1993; Dailey, 2006). In these ways, higher SCS relationships appeared to be experiencing the benefits of "positive sentiment override" (Gottman, 1994).

The prevalence of support over nonsupport in higher SCS relationships stood in contrast to lower SCS relationships in which nonsupport was twice as common than support. Lower SCS daughters' nonsupport took the form of rejecting, challenging, and dismissing messages whereas lower SCS mothers' expressed blame and antagonistic questioning, the culmination of which fostered a climate of criticism, defensiveness, and occasional hostility that contributed to longer and more frequent chains of competitive symmetry.

Support in lower SCS pairs was less frequent and often lacked the spontaneity and authenticity apparent in higher SCS pairs. Support exchanges reflected certain negative outcomes noted by Vangelisti (2009), such as support being considered unhelpful, bringing unwanted attention, and imposing a sense of emotional indebtedness. Unlike higher SCS daughters who generally welcomed their mothers' support, lower SCS daughters responded with some of the same avoidance strategies identified in demand/withdraw patterns, namely aggression, rejection, assertiveness, disinterest, discomfort, and terminating the conversation (Caughlin & Malis, 2004; Mazur, et al., 2004).

Lower SCS daughters' inclination to resist support from their mothers is attributable in part to a normative desire for autonomy across adolescence (Allen, Hause, Bell, & O'Connor, 1994; Grotevant & Cooper, 1986; Koesten, et al., 2001; Sillars, et al., 2005); however, young women from more nonsupportive and closed families may be particularly averse to accepting mother support. Koesten, et al. (2001) found daughters in more troubled families less able to experience individuality and connectedness at the same time, preventing them from seeking support and guidance from their parents for

fear of losing their sense of independence. When not desired, even well-intentioned support can feel like an invasion of privacy (Vangelisti, 2009; Petronio, 1991) or a threat to autonomy. To a certain extent, lower SCS daughters' excessive nonsupport, particularly in response to their mother's help or advice, may be better understood as rejection of a threat to desired autonomy, as much or more than rejection of their mother personally.

Alternately, lower SCS daughters' resistance may lie in the perception of their mothers' support as disingenuous or manipulative. Some lower SCS mothers struggled to express support in skillful and competent ways, appearing more judgmental or condescending than interested and sincere. In these cases, daughters' nonsupportive responses seemed motivated to communicate blatant dismissal of their mother.

Questions are another mode through which relational support and nonsupport are communicated. Asking questions is a standard parental strategy for staying informed of a child's whereabouts, activities, and well-being, so it was not surprising that mothers asked more questions than daughters. Lower SCS mothers in particular asked far more question-extensions although it appeared to work against relational satisfaction and closeness. Instead of promoting a reciprocal exchange of information and feelings, lower SCS mothers' excessive questioning at times felt conversationally burdensome or redundant and was largely reciprocated by daughters' nonsupport. Equally probable is that daughters' nonsupport prompted increased questioning from mothers, many of whom appeared intent on "pushing through" their daughters' resistance to forge a connection.

The nature and frequency of questions contributed to varying outcomes of effectiveness and satisfaction (see Escudero & Rogers, 2004a). Overall, higher SCS

mothers' questions appeared more straight-forward and earnest in intent, and garnered more positive and open responses from daughters. Lower SCS mothers issued far more questions and, while not to a significant degree, were more likely to ask questions that challenged or opposed. Given that mothers in this dataset seldom issued overt orders or instructions, it appeared that questions from many lower SCS mothers took the form of a masked attempt to exert influence without appearing outwardly controlling ("Wouldn't it be better…?" or "Don't you think…?"). When questions obscured an underlying attempt to influence, daughters were less likely to return a cooperative or "appropriate" response.

Mothers' propensity to ask more support-seeking questions than daughters was surprising, particularly given that it was daughters who were asked to discuss with their mothers a problem they were experiencing with someone outside their relationship. It was expected that due to age and the framing of that discussion topic, daughters would be more likely to seek advice or understanding from their mothers. Instead, mothers sought validation and understanding far more frequently from their daughters, mostly in solicitations of support for their parenting. Taken together, mothers' abundance of submissive behaviors, including support-seeking inquiries, suggests the notable emphasis mothers in this dataset placed on facilitating connection, harmony, and in some cases, gaining approval in this relationship.

In addition to offering and seeking more support, mothers also offered more neutralizing extensions than daughters, a behavior that stood out for its tendency to inhibit daughters' one-up maneuvers in both groups, and especially in lower SCS dyads. Interestingly, mothers' one-across behaviors, more than one-down concessions, had the greatest potential to effect a neutral or submissive response from daughters. Given

daughters' propensity for one-up retorts, this finding yields valuable insight for mothers seeking to influence a more collaborative relational tone. Where assertive and acquiescing strategies fell short, neutralizing responses invited cooperative exchange.

Discussion and Implications of Rigid Complementary Patterns

Supportive exchanges of submissive symmetry occurred in lower SCS dyads but were usually prematurely disrupted by lower SCS daughters' objections, diverting the pattern into one of rigid mother one-down/daughter one-up (M↓D↑) complementarity. Whether due to a perceived lack of earnestness in lower SCS mothers' one-down offerings, or lower SCS daughters' desire to safeguard their emotional autonomy, the potential benefits of submissive symmetrical patterns of support were rarely realized in lower SCS pairs. Nevertheless, while perhaps not as relationally beneficial, this form of rigid complementarity reflected a pattern in which parental tolerance and support may have been a functional compliment to relationally-challenging adolescent developmental characteristics including unstable cognitive structures, an undeveloped ability to take parents' perspective, and intentional avoidance of certain topics (Sillars, et al., 2005; Petronio, 1991; Mazur, et. al., 2004; Caughlin & Malis, 2004). Viewed in this light, mothers' unconditional acceptance (submissiveness) may have served to counterbalance insecurity and uncertainty inherent in this developmental phase with a reassurance of relational permanence (see Sillars, et al. 2005). In that way, mother one-down/daughter one-up (and daughter one-up/mother one-down) complementarity may affect a more stable and functional outcome in mother-adolescent daughter relationships than was found in marital relationships. Ultimately, however, in this dataset, potentially positive

effects may have been constrained by the tendency of this pattern to evolve into sequences of competitive symmetry (↑↑↑).

Discussion and Implications of Competitive Symmetrical Patterns

While parent-adolescent conflict can promote positive outcomes such as facilitating cognitive development and individuation, strengthening adolescents' decision-making abilities, and promoting confidence in their ability to voice opinions among family and peers (Koesten, et al., 2001; Graber & Brooks-Gunn, 1999; Steinberg, 1990; Smetana, 1989), the identification of "adaptive" versus "dysfunctional" (Holmbeck, 1996) conflict strategies between satisfaction groups in this study revealed qualitative differences in effectiveness.

Conflict episodes among higher SCS pairs generally occurred within a climate of openness and functionality. Disagreements among higher SCS dyads were not uncommon for most pairs but rarely escalated to a point of emotional heatedness, and typically ended in one partner acquiescing, partners' agreeing to disagree, or a diffusion of the conflict with humor. Acknowledging partners' strengths, admitting personal imperfections, perspective-taking, resolving problems together, and accepting influence, also fostered an environment in which higher SCS daughters asserted their individuality (Grotevant & Cooper, 1986) while adhering to interaction rules and responding to the other as they wished to be seen (Noller & Fitzpatrick, 1993). Consistent with previous findings, the key to effective conflict for these pairs included expressing anger without hostility and personal attack (Gottman, 1994), employing successful repair attempts, and deescalating destructive patterns by moving the conversation toward more neutralizing or submissive patterns (Escudero, et al., 1997). When higher pairs did engage in less

constructive conflict behaviors such as harsh start-ups or criticism, it was more likely to be interrupted by a move to de-escalate the conflict and return to more constructive tactics.

Among lower SCS dyads, conflict was more deleterious and in most cases comprised a combination of destructive behaviors that included blame, criticism, unwillingness to acknowledge personal shortcomings or positive characteristics in the other, negative attributions, resisting other's influence, antagonistic questioning, or personalizing disagreements, most of which prolonged and escalated the conflict. In this sample, some lower SCS dyads lacked even one partner working to divert or repair negativity. For the majority though, it was most often mothers who attempted to repair competitive symmetrical exchanges with a one-down message, which daughters rarely reciprocated. This reluctance to accept advice or instruction from their mother contributed to continued escalation of negativity that was seldom resolved.

For lower SCS dyads, destructive behaviors and tactics may have, to some extent, negated the potentially positive outcomes associated with parent/child conflict. Lower SCS daughters often appeared as negatively impacted as their mothers during and following disagreements, although their interpretation of the conflict may have differed. It has been suggested that mothers' and daughters' experience of an interaction is affected by the degree to which their expectations are violated by the other's position (Collins, 1990). Smetana (1998) explains that many parent-child conflicts represent not only differences of opinion, but differences of perspective as to the issue's legitimacy and gravity. Whereas parents are more likely to define conflict matters as having a moral component that dictates a right and wrong way to do something, teenagers are likely to

judge the same matter as an issue of personal choice. In the present study, issues such as daughters' keeping their rooms clean, dating, curfew, and when to do homework were usually argued by mothers according to a moral code that dictated a right and wrong, or better and worse behavioral option, or at least one that was sanctioned by social conventions, while daughters commonly saw these issues as their own business and of little relevance to their mothers or anyone else.

Defined in such divergent terms, disagreements are less likely to be resolved and feelings about the conflict may differ. Some researchers have suggested that parents and especially mothers on the "front lines" of parenting (Silverberg & Steinberg, 1987) walk away from conflict interactions with more negative emotion that stems from viewing their adolescent's disagreement (or disagreeableness) as a rejection of their values and a violation of their expectations of their child (Smetana, 1998; Stein 2001), while adolescents attribute less meaning to the conflict and are less upset by it. This did not seem to be the case for most lower SCS daughters who manifested noted distress in the moment of conflict and well after the disagreement was over, often tainting the tone of later discussions on more benign topics. Instead of the temporary upset seen in most higher SCS daughters, lower SCS daughters seemed to bear the emotional burden of hurt and frustration along their mothers, but seemingly without the knowledge or desire to break the pattern.

Discussion and Implications of Mother One-up/Daughter One-Down Transact

The key finding of this study is epitomized in higher SCS daughters' willingness to respond to their mothers' one-up messages with a one-down concession. Importantly,

both SCS groups experienced relational negativity and relational support, suggesting that while opposite behaviors they are not mutually exclusive and do not alone influence partners' evaluation of satisfaction, closeness, and support. Instead, the most prominent differentiator between higher and lower SCS dyads came down to adolescent daughters' inclination to object or concede to mothers' assertions. While still more domineering than their mothers, higher SCS daughters more often conceded to their mothers by agreeing, apologizing, cooperating, or accepting instruction or correction. Lower SCS daughters, by contrast, had more difficulty "giving in" or "going along with" their mothers by accepting her advice or agreeing to uphold a standard she wished imposed. As has been noted, the ability to verbalize disagreement can be a relational strength and a sign of healthy individuation, however among many lower SCS dyads, the intensity of daughters' negativity and inflexibility appeared to threaten the realization of positive effects.

Higher SCS daughters accepted their mothers' advice more readily and showed a greater willingness to "go with the flow" of their mothers' requests or concerns. Often invoking humor and/or humility, higher SCS daughters more often deemed their mothers' one-up assertions as justified or well-meaning and responded by either realigning their position with that of their mothers' or maintaining their ideological stance but deferring to their mothers' directive. Lower SCS daughters commonly evaluated their mothers' domineering messages as invasive or personally rejecting, which seemed warranted in some cases of outright attack. At other times, however, lower SCS mothers' one-up assertions did not differ in content or tone from those of higher mothers', but despite

being imparted with levity or gentleness, it failed to induce a submissive response from daughters.

What lower SCS dyads often lacked was an ability to strike a balance between partners' individual interest and the other's well being, a formula known to promote feelings of connectedness and individuality (Pinquart & Silbereisens, 2002). Instead, lower SCS daughters' attempts to exert autonomy at all costs via distancing and rejecting maneuvers, not only impaired relational satisfaction, but paradoxically, seemed to inhibit their communicative sophistication and flexibility, potentially limiting their desired independence and self-efficacy.

Implications for the Mother-Daughter Relationship

Previous research has concluded that positive parent-child relationships are those in which parent and child are mutually sensitive, flexible, open and honest, nurturing and validating of each other (Koesten, et al., 2001; Noller & Fitzpatrick, 1993; Satir, 1972; Sillars, et al., 2005; Steinberg, 1990; Steinberg 2001), and effective parents are those who are warm and involved in their child's life, firm and consistent in upholding rules and boundaries, and supportive of children's developing autonomy (Baumrind, 1971; see Steinberg 2001 for review).

In this study, open and nurturing submissive exchanges among higher SCS dyads promoted intimacy and understanding, while adaptive conflict enabled daughters to maintain psychological autonomy and increase communicative ability. Ultimately, it was higher SCS daughters' occasional deference to their mothers, along with an abundance of support from mothers that cultivated a communicative climate in which partners were mutually confirmed and allowed to express individuality along with connectedness.

Alternately, the relative infrequency of support and positivity among lower SCS dyads inhibited the "prophylactic function" of support (Vangelisti, 2009, p. 46), leaving these relationships with little defense against the damaging effects of high domineeringness, rigid complementarity, competitive symmetry, and nonsupport that marked their relational style.

Inasmuch as the family, and specifically the parent-child relationship is the most important context in which young women develop their discursive skills, identity, and behavioral repertoires (Bruner, 1990; Koesten, et al., 2001), and the mother-daughter relationship is the most common outlet for conflict and disclosure (Allison & Schultz, 2004; Collins & Russell, 1991), the functionality of this relationship is integral in maximizing positive outcomes for both parent and child, from developing competent discursive skills, to confirming individual identity, to gleaning the benefits of mutual support and connection.

Study Limitations and Future Directions

This study makes an important contribution to the relational communication body of research, although certain limitations must be considered when interpreting the results. First, adolescents included in this study were limited to those between 14 and 18 years old to allow reasonable comparisons to be made across developmental stages. Nonetheless, the developmental span between 14 and 18 can at times be vast and this study does not attempt a serious investigation of age and developmental factors. Future studies may consider daughters' age a useful categorization instead of or in addition to SCS-type qualifiers.

While the study design allowed mother and daughter interactions to be observed in the natural surroundings of their own home, it is fair to assume that videotaping their conversations had some impact on participants' communicative behaviors. That said, it was the researcher's observation that after the first few minutes of interaction, their awareness of the recording was not an issue, and several participants commented to that effect afterwards as well. Nevertheless, the videorecording, along with the scripted nature of the discussion topics posed may make the conversations in this study vary somewhat from spontaneous everyday conversations.

Although a demographic survey was not taken, socioeconomic identifiers were generally observed. While there was to an extent racial, ethnic, economic, and religious diversity, results of this study are assumed not to be representative of all populations. Future research replicating these methods should attend to broadening the diversity of the sample.

Using a dyadic measure to represent the combined SCS score is a common means of gauging the overall satisfaction (or similar measure) of relational participants. A limitation however is in its potential to obscure substantially different perspectives between partners. For this reason, evaluating the data using individual or more discriminating dyadic measures may provide a more accurate representation on which interaction patterns are associated with daughters' lower or higher satisfaction versus mothers' lower or higher satisfaction, etc.

As is the case with many relational studies, this study measures relationships at a given point in time. While not necessarily a limitation of this study, it is important to recognize the limitation inherent in observations of any relationship based on one

interaction. Still, this study offers an informative and compelling starting point for understanding mother-adolescent daughter relationships.

A useful method in conjunction with videotaping is to have participants view their interactions and comment on their attitudes, behaviors, and strategies, etc. as they enacted the conversation. The addition of participant perspective would add another layer of understanding to those gained by the RCCCS and interpretive measures and has been implemented in the interpersonal communication literature (Ickes & Tooke, 1988; Sillars et al., 2005).

Following Escudero, Rogers, and Gutierrez (1994), future analysis using the RCCCS could incorporate nonverbal affect as was done in their study by attending to gestures, proxemics, and paralinguistic modes of communication. While a separate analysis of nonverbal affect is outside the scope of the present study, the videotaping method utilized makes it a possibility. As well, control intensity would be advantageous to examine in future studies as a depiction of message strength. This measure denotes the "differing units or 'amounts' of upness, acrossness and downness" embedded in a given message (Rogers, Courtright & Millar, 1980, p. 202). While not explicitly examined in this study, consideration of nonverbal behavior and message intensity is inherent in the coding process. Nevertheless, capturing the intensity continuum within each sequence and dyad would increase the descriptive value of the coding method. For example, distinguishing a nonsupport message that is impassioned from one that is indifferent may be useful in identifying escalating sequences that are fueled by anger versus those perpetuated by an absence of concern or by milder irritation.

Future studies could also consider exploring the mother-daughter relationship in different settings. Almost without exception, mothers and daughters in this study remarked to the researcher that a majority of their conversations occur while driving or while preparing food or doing other household activities together. These settings may pose technological challenges particularly in regards to videotaping although audio recording may be more feasible.

As well, consideration of mothers with daughters younger or older than those in this study would increase our knowledge base for this relationship. An examination of other family relationships including parent-child, sibling, and step-family, would contribute to expansion of knowledge beyond the existing studies of marital and triadic family relationship and now the mother-adolescent daughter relationship. Applying the relational communication approach to other understudied relationships within the family can greatly inform the understanding of not only individual relationships but of the family as a whole.

Conclusions

This study appears to be the first of its kind in applying the relational communication perspective to the mother-daughter relationship. While preliminary, these findings begin to define the range of behaviors and patterns that characterize mother and adolescent daughter interactions, offering a new description of relational control movement that stands to benefit not only mothers and daughters, but families as a whole, as well as clinicians and teachers.

In addition to expanding the body of knowledge of mothers and daughters in general, this study is of particular import in that it pioneers the overlapping of relational

control methodology with qualitative interpretive analysis. The case comparison method (Fairhurst, 1993) guided a process of examining the behavioral nuances of the discourse to bring dialogic life to the behavioral patterns identified by the relational communication coding scheme. The result is a richer and more substantive explication of the interactional "dance" (Rogers, 2004) that paints in broad strokes the global patterns of control, support, and conflict highlighted by the relational communication approach, while illuminating the relational nuances accessible through qualitative inquiry of content and relational level messages. In combination, quantitative and qualitative approaches, like good relationships, stand on their own, yet together provide a more robust picture of the communication patterns that differentiate more and less satisfied, intimate, and supportive mother and daughter relationships. To that end, this investigation makes a notable contribution methodologically and to the relational and family communication literature.

APPENDIX A

PARTICIPANT CONSENT LETTER

DATE

Dear [Participant Name],

Thank you for your willingness to participate in a research study being conducted in the Communication Department at The University of Utah!

Your help is very appreciated and will help us get a better understanding of mother-daughter relationships. I think you will find that the experience of participating in the study will be very interesting. As well, I hope the findings of the study may be useful to you and other families.

Your involvement in the study involves three steps and is quite simple. Enclosed is a consent form that will explain in detail what you will be doing in the study. Please read it carefully and if you are willing to participate, **(1)** ***sign the consent form*** and I will pick it up when I visit your home at our scheduled time. Also enclosed are two questionnaire surveys; one is meant for the mother and one for the daughter. **(2)** ***Please complete the questionnaires right when you receive this packet. You should each complete your designated questionnaire in separate rooms without discussing your answers with each other. When you are done, seal the completed questionnaire in the envelopes that have been provided and hold onto them until I pick them up at my visit.***

If we have not already arranged a time for my home visit, I will call you to schedule a time that I, or my research assistant, can **(3)** ***come to your home to videorecord the two of you having a conversation with each other***. At that time I will give you four questions to talk about together that are fairly typical mother-daughter conversation topics. The researcher will give you the question, start the videotape, and then leave you alone in the room to discuss each question for about 8-10 minutes. This visit, including set-up, should take about an hour.

Your personal information and participation will be strictly confidential. Unless you indicate otherwise, the only people who will see the videotapes are members of the research team. Any reports of the study will not reference you personally and you will never be identified. The data from the study will be secured by the researcher and only used for research purposes.

If you have any questions, concerns, or comments you may contact me, Jennifer Cummings, principal investigator for the study, at 801-556-1585 or j.cummings@utah.edu. You may also contact Dr. Edna Rogers at 801-944-0222 or edna.rogers@utah.edu.

Again, thank you for your willingness to contribute to an important research study. Your participation is very valuable and much appreciated.

Best Regards,
Jennifer Cummings
Principal Investigator

APPENDIX B

PARTICIPANT CONSENT, ASSENT, AND PERMISSION FORM

Consent Document

Background

You are being invited to take part in a research study. Before deciding whether or not to participate, it is important for you to understand why the research is being done and what it will involve. Please read the following information carefully. Ask about anything that is not clear or about which you would like more information. Take time to decide whether you want to volunteer to take part in this study. If you decide to participate, be assured that your contribution will be appreciated and used to benefit many interested people.

The purpose of this study is to better understand everyday conversations between mothers and adolescent daughters. This study is seeking new insights into how moms and teenage daughters interact in conversation about typical issues faced by many mothers and adolescent daughters.

Study Procedure

As a participant, you will be asked to do two things. You will be given a brief survey that you will complete privately in your home. The survey will ask you questions about your relationship with your mother or adolescent daughter, as well as basic demographic information. The survey will take about 10-15 minutes to complete. The two of you (mother and daughter) will complete your surveys separately, seal them in separate envelopes, and mail them back to the researcher in a pre-addressed and stamped envelope provided by the researcher.

About one week later at a prearranged time, the researcher will come to your home to videotape the two of you having a conversation with each other about various relationship topics that will be given to you. The researcher will remain on-site but will leave the room during your videotaped discussion. It should feel like you are simply having a conversation at home about typical mother-daughter relationship topics. You will be given an opportunity to read the questions before you begin talking. The actual conversation with each other will probably last 30-40 minutes. The researcher's visit will last approximately one hour.

Risks

The risks involved in this study are minimal. The only potential discomfort you may experience is whatever level of stress you may feel during a typical mother-daughter interaction, if any.

There is no pressure or expectation for you to interact in a particular way. There is no "right" or "wrong" way to behave. Just be yourself. The point of the study is to simply observe how mothers and daughters talk with one another in everyday conversations.

Should you find the situation uncomfortable for any reason you may simply discontinue the interaction.

Benefits

There are not necessarily direct benefits for taking part in this study, although your participation will be greatly appreciated. We do anticipate that the interaction experience may be insightful for you as a participant and that the information developed in the study may help you, researchers, and people in general to have a better understanding of mother-daughter relationships.

Confidentiality

Your personal information will be kept confidential. You will never be personally identified in any reports about this study. The data and records generated in this study will remain in the possession of the researcher. The only persons who will have full access to the information or view the videotapes will be members of the research team who will analyze the interactions. Short segments of the interactions may be shown as illustrations during professional research presentations, without disclosing names. A description of the study and reports of the findings may appear in academic publications, again without direct identification of or reference to specific participants. Data and records will be stored in a password-protected computer under the researcher's control.

If you agree to participate in the study, you will have the option to request that your videotaped conversation be kept strictly confidential, or you may give permission for your videotaped conversation to be used in teaching contexts (your names will still be kept confidential). Your videotaped conversation will only be used in teaching contexts if both mother and daughter select this option. If only one, or neither of you, select this option, the taped conversation will remain confidential.

If you disclose actual or suspected abuse, neglect, or exploitation of a child, or disabled or elderly adult, the researcher or any member of the study staff must, and will, report this to Child Protective Services (CPS), Adult Protective Services (APS) or the nearest law enforcement agency.

Person to Contact

If you have questions, comments, or concerns about this study, you may contact Jennifer Cummings, principal investigator for this study at 801-556-1585 between 8am and 8pm. If you feel you have been harmed as a result of participation, please notify Jennifer Cummings. You may also discuss concerns with Dr. Edna Rogers, Professor, Department of Communication at The University of Utah, who is the faculty sponsor for this research. She may be reached at 801-944-0222 during business hours or by email at edna.rogers@utah.edu.

Institutional Review Board: Contact the Institutional Review Board (IRB) if you have questions regarding your rights as a research participant. Also, contact the IRB if you have questions or concerns which you do not feel you can discuss with the investigator. The University of Utah IRB may be reached by phone at 801-581-3655 or by e-mail at irb@hsc.utah.edu.

Research Participant Advocate: You may also contact the Research Participant Advocate (RPA) by phone at (801) 581-3803 or by email at participant.advocate@hsc.utah.edu.

Voluntary Participation

It is up to you to decide whether or not to take part in this study. Your participation will be greatly appreciated and aid in valuable research. A decision to not participate will not result in any penalty or loss of benefits to which you are otherwise entitled. You may discontinue participation in the study at any time with no penalty or loss of benefits to which you are otherwise entitled.

Costs and Compensation to Participants

There are no costs to you for participating in this study, and no monetary compensation.

Consent

By signing this consent form, I confirm I have read the information in this consent form and have had the opportunity to ask questions. I will be given a signed copy of this consent form. I voluntarily agree to take part in this study.

_____
Printed Name of Participant

_____ _____
Signature of Participant Date

_____
Printed Name of Researcher or Staff

_____ _____
Signature of Researcher or Staff Date

Parental Permission Document

Background

Your daughter is being invited to take part in a research study. Before deciding whether or not to participate, it is important for you to understand why the research is being done and what it will involve. Please read the following information carefully. Ask about anything that is not clear or about which you would like more information. Take time to decide whether you will allow your daughter to volunteer to take part in this study.

The purpose of this study is to better understand everyday conversations between mothers and adolescent daughters. This study is seeking new insights into how moms and teenage daughters interact in conversation about typical issues faced by many mothers and adolescent daughters.

Study Procedure

As a participant, your daughter will be asked to do two things. She will be given a brief survey that she will complete privately in your home. The survey will ask questions about her relationship with her mother, as well as basic demographic information. The survey will take about 10-15 minutes to complete. Both mother and daughter will complete similar surveys separately, seal them in separate envelopes, and mail them back to the researcher in a pre-addressed and stamped envelope provided by the researcher.

About one week later at a prearranged time, the researcher will come to your home to videotape mother and daughter having a conversation with each other about various relationship topics provided by the researcher. The researcher will remain on-site but will leave the room during the videotaped discussion. It should feel like having a typical conversation at home about everyday mother-daughter relationship topics. The actual conversation with each other will probably last 30-40 minutes. The researcher's visit will last approximately one hour.

Risks

The risks involved in this study are minimal. Your daughter may potentially feel discomfort thinking or talking about personal information related her relationship with her mother. These risks are similar to those experienced when discussing everyday topics with her mother. If your daughter feels upset from this experience, you or your daughter can tell the researcher and she will discontinue the research interaction.

Benefits

There are not necessarily direct benefits to your daughter for taking part in this study, although her participation will be greatly appreciated. This experience may be insightful for your daughter as a participant and we hope that the information developed in the study will help develop a greater understanding of mother-daughter relationships.

Confidentiality

Your daughter's personal information will be kept confidential. She will never be personally identified in any reports about this study. The data and records generated in this study will remain in the possession of the researcher. The only persons who will have full access to the information or view the videotapes will be members of the research team who will analyze the interactions. Short segments of the interactions may be shown as illustrations during professional research presentations, without disclosing names. A description of the study and reports of the findings may appear in academic publications, again without direct identification of or reference to specific participants. Data and records will be stored in a password-protected computer under the researcher's control.

If your daughter participates in the study, she will have the option to request that the videotaped conversation be kept strictly confidential, or she may give permission for the videotaped conversation to be used in teaching contexts (names will still be kept confidential). The videotaped conversation will only be used in teaching contexts if both mother and daughter select this option. If only one, or neither, select this option, the taped conversation will remain confidential.

If your child discloses actual or suspected abuse, neglect, or exploitation of a child, or disabled or elderly adult, the researcher or any member of the study staff must, and will, report this to Child Protective Services (CPS), Adult Protective Services (APS) or the nearest law enforcement agency. If your child discloses information about harming others or herself (i.e. suicide), the researcher is likewise obligated to report those threats to public health and safety.

Person to Contact

If you have questions, comments, or concerns about this study, you may contact Jennifer Cummings, principal investigator for this study at 801-556-1585 between 8am and 8pm. If you feel your child has been harmed as a result of participation, please notify Jennifer Cummings. You may also discuss concerns with Dr. Edna Rogers, Professor, Department of Communication at The University of Utah, who is the faculty sponsor for this research. She may be reached at 801-944-0222 during business hours or by email at edna.rogers@utah.edu.

Institutional Review Board: Contact the Institutional Review Board (IRB) if you have questions regarding your child's rights as a research participant. Also, contact the IRB if you have questions, complaints or concerns which you do not feel you can discuss with the investigator. The University of Utah IRB may be reached by phone at (801) 581-3655 or by e-mail at irb@hsc.utah.edu.

Research Participant Advocate: You may also contact the Research Participant Advocate (RPA) by phone at (801) 581-3803 or by email at participant.advocate@hsc.utah.edu.

Voluntary Participation
It is up to you to decide whether or not to allow your daughter to take part in this study. Refusal to allow your daughter to participate or the decision to withdraw your child from this research will involve no penalty or loss of benefits to which your child is otherwise entitled. This will not affect your or your daughter's relationship with the investigator.

Costs and Compensation to Participants
There are no costs to you for participating in this study, and no monetary compensation.

Consent
By signing this consent form, I confirm I have read the information in this parental permission form and have had the opportunity to ask questions. I will be given a signed copy of this parental permission form. I voluntarily agree to allow my child to take part in this study.

_____
Child's Name

_____
Parent/Guardian's Name

_____ _____
Parent/Guardian's Signature Date

_____
Relationship to Child

_____
Name of Researcher or Staff

_____ _____
Signature of Researcher or Staff Date

Daughter Assent to Participate in a Study

Purpose of the Research

We are asking you to take part in a research study because we are trying to learn more about how mothers and teenage daughters talk with each other in everyday conversations.

Procedure/Intervention/Method

If you agree to be in this study you will privately complete a survey where you answer about 20-30 questions about your relationship with your mom. This will take about 10-15 minutes to complete. Your mother will complete a similar survey. You and your mom will not show each other your survey answers and you will not be asked to talk about your answers with each other. You will seal your surveys in separate envelopes and mail them back to the researcher. About one week later, the researcher will come to your home and give you and your mom several questions to discuss together about your relationship. The researcher will not be in the room during your conversation but your conversation will be videotaped and audiotaped. The conversation will take about 30-40 minutes and the researcher's visit will take approximately one hour.

Risks

There are no serious risks to you by participating in this study. The questions you will be asked are typical in mother-daughter relationships. The only potential risk is if you experience discomfort discussing issues with your mother.

Benefits

Being in this study will help us to understand how mothers and teenage daughters talk with each other about everyday issues in their lives and about their relationship. You may learn helpful things about yourself, your mother, and your relationship.

Alternative Procedures and Voluntary Participation

If you don't want to be in this study, you don't have to be in it. Remember, being in this study is up to you and no one will be upset if you don't want to participate. You may change your mind later if you want to stop. Please talk this over with your parents before you decide whether or not to participate. We will also ask your parents to give their permission for you to take part in this study. But even if your parents say "yes" you can still decide not to do this.

Confidentiality

All of your records about this research study will be kept locked up so no one else can see them. Your real name will never be used in the study. Only the researcher and research assistants will have access to your records.

If you participate in the study, you will have the option to request that your videotaped conversation be kept strictly confidential, or you may give permission for your videotaped conversation to be used in teaching contexts (your names will still be kept confidential). Your videotaped conversation will only be used in teaching contexts if both you and your mother select this option. If only one, or neither of you, select this option, the taped conversation will remain confidential.

Person to Contact

You can ask any questions that you have about the study. If you have a question later that you didn't think of now, you can call me, Jennifer Cummings, at 801-556-1585, or email me at j.cummings@utah.edu, or ask me the next time we are together.

Consent

Signing my name at the bottom means that I agree to be in this study. My parents and I will be given a copy of this form after I have signed it.

_____
Printed Name of Child

_____ _____
Signature of Child Date

_____
Printed Name of Witness

_____ _____
Signature of Witness Date

APPENDIX C

RELATIONSHIP QUESTIONNAIRE

MOTHER QUESTIONNAIRE – PART A
RELATIONSHIP QUESTIONNAIRE

MOTHER: Please answer the following questions about your relationship with your daughter by circling the number that best represents your feelings.

1. **How much free time do you spend with your daughter?**

Little or none	Not Much	Some	Quite A Lot	A Lot
1	2	3	4	5

2. **How often do you turn to your daughter for support with personal problems?**

Little or never	Not Often	Sometimes	Quite Often	Almost Always
1	2	3	4	5

3. **How often do you and your daughter talk?**

Little or never	Not Often	Sometimes	Quite Often	Almost Always
1	2	3	4	5

4. **How much do you and your daughter get upset with or mad at each other?**

Little or never	Not Often	Sometimes	Quite Often	Almost Always
1	2	3	4	5

5. **How happy are you with the way things are between you and your daughter?**

Not happy at all	Not Very Happy	Somewhat Happy	Quite Happy	Very Happy
1	2	3	4	5

6. **How much do you have a strong feeling of affection (loving or liking) toward your daughter?**

Little or none	Not Much	Some	Quite A Lot	A Lot
1	2	3	4	5

7. **How much do you and your daughter get on each other's nerves?**

Little or never	Not Often	Sometimes	Quite Often	Almost Always
1	2	3	4	5

8. **How often do you go places and do enjoyable things with your daughter?**

Little or never	Not Often	Sometimes	Quite Often	Almost Always
1	2	3	4	5

9. **When you are feeling down or upset, how often do you depend on your daughter to cheer things up?**

Little or never	Not Often	Sometimes	Quite Often	Almost Always
1	2	3	4	5

10. **How much do you and your daughter hassle or nag one another?**

Little or never	Not Often	Sometimes	Quite Often	Almost Always
1	2	3	4	5

11. **How good is your relationship with your daughter?**

Not Good at all	Not Very Good	Good	Quite Good	Very Good
1	2	3	4	5

12. How much do you talk about everything with your daughter?

Little or never	Not Often	Sometimes	Quite Often	Almost Always
1	2	3	4	5

13. How much do you protect and look out for your daughter?

Little or none	Not Much	Some	Quite A Lot	A Lot
1	2	3	4	5

14. How much do you and your daughter get annoyed with each other's behavior?

Little or never	Not Often	Sometimes	Quite Often	Almost Always
1	2	3	4	5

15. How often do you share your secrets and private feelings with your daughter?

Little or never	Not Often	Sometimes	Quite Often	Almost Always
1	2	3	4	5

16. How much does your daughter have a strong feeling of affection (loving or liking) toward you?

Little or none	Not Much	Some	Quite A Lot	A Lot
1	2	3	4	5

17. How much do you and your daughter argue with each other?

Little or never	Not Often	Sometimes	Quite Often	Almost Always
1	2	3	4	5

18. How often do you get affection, like hugs and kisses, from your daughter?

Little or never	Not Often	Sometimes	Quite Often	Almost Always
1	2	3	4	5

19. How much do you and your daughter disagree and quarrel?

Little or never	Not Often	Sometimes	Quite Often	Almost Always
1	2	3	4	5

20. How satisfied are you with your relationship with your daughter?

Not Satisfied at all	Not Very Satisfied	Somewhat Satisfied	Quite Satisfied	Very Satisfied
1	2	3	4	5

21. Overall, how close are you (how much do you share your feelings) with your daughter?

Not Close at all	Not Very Close	Somewhat Close	Quite Close	Very Close
1	2	3	4	5

22. Who tells the other person what to do more often, you or your daughter?

Me	My Daughter
1	2

MOTHER QUESTIONNAIRE – PART B

1. What is your age?

☐ 20-30 years ☐ 30-40 years ☐ 40-50 years ☐ 50-60 years ☐ 60+ years

2. Please circle the last grade or degree completed in school:

7 8 9 10 11 High School Diploma Some College Bachelor's Degree Graduate Degree

3. If you are employed, how many hours per week do you work? _____

4. How many children do you have? _____

5. How many daughters do you have? _____

6. How many children do you have living with you at home? _____

7. Where does this daughter come in the order of your children? (for example, is she your
1st child, 2nd child, 5th child, etc.)

1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th Other _____

Additional Consent (Optional):
You have the option to request that your videotaped conversation be kept strictly confidential, or you may give permission for your videotaped conversation to be used in teaching contexts. Your videotaped conversation will only be used in teaching contexts if both you and your mother select this option. If only one, or neither of you, select this option, the taped conversation will remain confidential.

If you would be willing to grant consent for your video or audiotaped conversation to be used for teaching and training purposes, and/or research presentations, please indicate and sign below. Your name will still be kept confidential.

I consent to the use of my **videotaped** conversation to be shown for teaching and training purposes.
☐ Yes ☐ No Signature _____

I consent to the use of my **audiotaped** conversation to be played for teaching and training purposes.
☐ Yes ☐ No Signature _____

DAUGHTER QUESTIONNAIRE – PART A
RELATIONSHIP QUESTIONNAIRE

DAUGHTER: Please answer the following questions about your relationship with your mother by circling the number that best represents your feelings.

1. **How much free time do you spend with your mother?**

Little or none	Not Much	Some	Quite A Lot	A Lot
1	2	3	4	5

2. **How often do you turn to your mother for support with personal problems?**

Little or never	Not Often	Sometimes	Quite Often	Almost Always
1	2	3	4	5

3. **How often do you and your mother talk?**

Little or never	Not Often	Sometimes	Quite Often	Almost Always
1	2	3	4	5

4. **How much do you and your mother get upset with or mad at each other?**

Little or never	Not Often	Sometimes	Quite Often	Almost Always
1	2	3	4	5

5. **How happy are you with the way things are between you and your mother?**

Not happy at all	Not Very Happy	Somewhat Happy	Quite Happy	Very Happy
1	2	3	4	5

6. **How much do you have a strong feeling of affection (loving or liking) toward your mother?**

Little or none	Not Much	Some	Quite A Lot	A Lot
1	2	3	4	5

7. How much do you and your mother get on each other's nerves?

Little or never	Not Often	Sometimes	Quite Often	Almost Always
1	2	3	4	5

8. How often do you go places and do enjoyable things with your mother?

Little or never	Not Often	Sometimes	Quite Often	Almost Always
1	2	3	4	5

9. When you are feeling down or upset, how often do you depend on your mother to cheer things up?

Little or never	Not Often	Sometimes	Quite Often	Almost Always
1	2	3	4	5

10. How much do you and your mother hassle or nag one another?

Little or never	Not Often	Sometimes	Quite Often	Almost Always
1	2	3	4	5

11. How good is your relationship with your mother?

Not Good at all	Not Very Good	Good	Quite Good	Very Good
1	2	3	4	5

12. How much do you talk about everything with your mother?

Little or never	Not Often	Sometimes	Quite Often	Almost Always
1	2	3	4	5

13. How much do you protect and look out for your mother?

Little or none	Not Much	Some	Quite A Lot	A Lot
1	2	3	4	5

14. How often do you and your mother get annoyed with each other's behavior?

Little or never	Not Often	Sometimes	Quite Often	Almost Always
1	2	3	4	5

15. How often do you share your secrets and private feelings with your mother?

Little or never	Not Often	Sometimes	Quite Often	Almost Always
1	2	3	4	5

16. How much does your mother have a strong feeling of affection (loving or liking) toward you?

Little or none	Not Much	Some	Quite A Lot	A Lot
1	2	3	4	5

17. How much do you and your mother argue with each other?

Little or never	Not Often	Sometimes	Quite Often	Almost Always
1	2	3	4	5

18. How often do you get affection, like hugs and kisses, from your mother?

Little or never	Not Often	Sometimes	Quite Often	Almost Always
1	2	3	4	5

19. How much do you and your mother disagree and quarrel?

Little or never	Not Often	Sometimes	Quite Often	Almost Always
1	2	3	4	5

20. How satisfied are you with your relationship with your mother?

Not Satisfied at all	Not Very Satisfied	Somewhat Satisfied	Quite Satisfied	Very Satisfied
1	2	3	4	5

21. Overall, how close are you (how much do you share your feelings) with your mother?

Not Close at all	Not Very Close	Somewhat Close	Quite Close	Very Close
1	2	3	4	5

22. Who tells the other person what to do more often, you or your mother?

Me	My Mother
1	2

DAUGHTER QUESTIONNAIRE – PART B

1. What is your age?
   ☐ 14 years ☐ 15 years ☐ 16 years ☐ 17 years ☐ 18 years

2. What grade are you in at school?:

   7^{th} 8^{th} 9^{th} 10^{th} 11^{th} 12^{th}

3. If you are employed outside of school, how many hours per week do you work?
_____

4. How many siblings do you have? _____

5. How many siblings do you have living with you at home? _____

6. Where do you come in the order of your siblings? (for example, are you the 1^{st} child, 2^{nd} child, 5^{th} child, etc.)

   1^{st} 2^{nd} 3^{rd} 4^{th} 5^{th} 6^{th} 7^{th} 8^{th} 9^{th} 10^{th}

Additional Consent (Optional):
You have the option to request that your videotaped conversation be kept strictly confidential, or you may give permission for your videotaped conversation to be used in teaching contexts. Your videotaped conversation will only be used in teaching contexts if both you and your mother select this option. If only one, or neither of you, select this option, the taped conversation will remain confidential.

If you would be willing to grant consent for your video or audiotaped conversation to be used for teaching and training purposes, and/or research presentations, please indicate and sign below. Your name will still be kept confidential.

I consent to the use of my **videotaped** conversation to be shown for teaching and training purposes.
☐ Yes ☐ No Signature _____

I consent to the use of my **audiotaped** conversation to be played for teaching and training purposes.
☐ Yes ☐ No Signature _____

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